PROCEDURES GUIDELINES
AND
DESIGN REQUIREMENTS

Revised: July 2015

Marina Coast Water District
11 Reservation Road
Marina, CA 92933
(831) 384-6131

FOREWORD

The Marina Coast Water District adopted the *Procedures Guidelines and Design Requirements* and the *Standard Plans and Specifications for Construction of Domestic Water, Sewer and Recycled Water Facilities* on September 24, 2003. This revision is consistent with Board Action which anticipated periodic updates and modifications. The purpose of these documents is to ensure that construction of all facilities to be operated and maintained by the District is standardized wherever possible. Sections 100–600 were revised in 2007 and replace the previous versions dated August 2005. Section 700 was revised in 2009.

These documents may contain minor errors, discrepancies or omissions. The District reserves the right to make changes to these documents at any time. If users of these documents identify recommended changes, we ask you to please notify the Marina Coast Water District in writing at the following address:

Marina Coast Water District
Deputy General Manager / District Engineer
11 Reservation Road
Marina, CA 93933

REVISIONS

The *Procedures Guidelines and Design Requirements* and the *Standard Plans and Specifications for Construction of Domestic Water, Sewer and Recycled Water Facilities* will be reviewed and may be revised periodically, as needed. Each revision will bear the date of the revision and that data shall be considered the latest edition as referred to the herein and in all subsequent advertisements, permits, and Contract Documents.

MCWD will no longer provide hardcopies or CDs of these standards. They will remain posted at the MCWD Website: www.mcwd.org.

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SECTION 100

GENERAL STEPS FOR PROCURING DOMESTIC WATER, SEWER AND RECYCLED WATER SERVICE FROM MARINA COAST WATER DISTRICT

100.1 PURPOSE

The purpose of the Procedures Guidelines and General Design Requirements (Guidelines) is to provide Marina Coast Water District (District) customers with a guide to the District procedures.These Guidelines also provide a listing of the general design criteria for each of the three types of systems the District operates or plans to operate and maintain; domestic water, sewer, and recycled water. These guidelines are to be used in conjunction with the District's Code, and the "MCWD Standard Plans and Specifications".

100.2 WATER AND SEWER SERVICE

If the applicant or his/her agent is applying for a business license, a building permit, or seeking approval of any planning documents and maps from a land use agency, then the applicant must apply for water and sewer service. The applicant must complete the Residential Connection Form and Permit Application (See Appendix 1); the Commercial Connection Form and Permit Application (See Appendix 2); or enter into a Construction and Transfer of Water, Sewer, and Recycled Water Infrastructure Agreement (See Appendix 3) with the District. This includes all entities that may or may not propose structural improvements to its business, structure, or property. This includes all applicants with or without an existing water meter or sewer lateral to its business, structure, or property. The applicant must pay all applicable fees and charges, and if required, capacity charges prior to receiving service. The applicant must also comply with all other applicable design, construction and District Code requirements prior to receiving service.

100.3 ANNEXATION TO EXISTING DISTRICT AREA

If the proposed development is not included within the existing MCWD service area, the developer must file a formal application for annexation to the District. The request for annexation must be submitted to the District's General Manager for action by the District’s Board of Directors. The request must be accompanied by a complete legal description of the property to be annexed, three (3) copies of the property map, and the appropriate fees as determined by the District. The applicant should allow a minimum of 180 days for processing the annexation request.

100.4 WILL SERVE LETTERS

For proposed developments within the District’s boundaries, the developer must request a "Will Serve" as well as conditions of approval letter, if any, letter from the District. These documents are required by the local jurisdictional agencies for processing Tentative Tract Maps or development reviews. For a copy of a sample letter, see Appendix 4.

100.5 APPLICATION PROCESSING

The approval process prior to receiving water and sewer service varies slightly. There are generally three categories of projects. The first category is for subdivisions. The second category is for projects which are limited to a single lot, like the construction or modification of residential and/or commercial units. The third category is for existing structures where *no* or only minor structural or plumbing fixture changes

are proposed. The application review process for each category is shown on the flow chart referenced as Figure 100-1.

The specific information required for each submittal is included in Section 200. For a more detailed application process flow chart that contains appropriate references for each sub-section, please see Figures 100-2 through 100-4.

100.6 SUBDIVISION APPROVAL PROCESS

For subdivisions, the developer must design water and sewer improvements to comply with the District design standards prior to submitting the improvement plans and other required information to the Engineer for his/her processing. The Plan Check Engineer, District Engineer or his/her designee will review all water and sewer conceptual plans or construction plans and specifications and may require revision, modifications, or redesign of any concepts, drawings, details or specifications submitted. **Construction must begin within one year of the approved water and/or sewer construction drawings**. If more than one year has elapsed, the project must go through plan check procedure again before starting construction. The steps to obtain plan or project site map approval are as follows:

100.6.1 Preliminary Planning Meetings.

The developer must schedule a meeting with District staff to discuss the proposed project. The developer must provide the District preliminary planning documents for review and comment. Planning documents include but, are not necessarily limited to the Conceptual Plans, Subdivision Water Master Plans, Subdivision Sewer Master Plans, Tentative Maps, a project site map with water and sewer facilities shown and any other maps or drawings as my be required by the District Engineer or his/her. The developer must also enter into the District's Construction and Transfer of Infrastructure Agreement prior to submitting its first plan check.

100.6.2 First Plan Check

After review and approval of any planning documents and execution of the District's Construction and Transfer of Infrastructure Agreement, the developer may submit his first plan check. ***The District will attempt to complete the first plan check within thirty (30) working days of the submittal date, providing that the submittal meets the First Plan Check Requirements (See Section 300) and all fees have been paid.*** There may be variances in this schedule due to a number of factors, the District cannot guarantee these processing intervals, but they are general guidelines. See Appendix 5 for the Plan Check Checklist. For a discussion of the first plan check, please see Section 200.3.

Each submittal shall include a transmittal listing all items submitted. Details regarding design criteria are included in Section 400 for water and Section 500 for sewer.

After District staff reviews the first plan check submittal for completeness, the plans may be sent to District's consultants for detailed review. The developer shall be responsible for consultant fees and will address all District comments.

100.6.3 Submit Subsequent Plan Checks

For each subsequent plan check, the developer must submit the following: Previous District plan check,

two copies of revised construction drawings and specifications, and any additional material requested. If the submittal is incomplete, they will be returned for revisions. This procedure will be repeated as necessary until drawings are complete. The District should complete the second plan check within fifteen (15) working days, and any subsequent check, without significant changes, should take no more than seven (7) working days each. There may be variances in this schedule due to a number of factors, the District cannot guarantee these processing intervals, but they are general guidelines.

100.6.4 Bond Estimates and Agreements

At the completion of the second plan check, the plans should be complete enough that the Bond Worksheet (See Appendix 6) can be completed to determine the required bond estimates. The completed bond estimate will be sent to the applicant for execution. The bonds and required fees must all be executed and endorsed properly by the developer and returned to the District before the final plans can be signed by the District. All corrections must be made on the final plans before approval. Should the required corrections after second plan check be extensive enough to affect the total quantities of the facilities to be constructed, the District reserves the right to postpone the preparation of the agreements and bonds until such time as the quantity of work to be done is finalized.

100.6.5 Final Plan Approval

After all plan checks are completed, bond estimates, and the plans are acceptable to the District staff, the original Mylar's will be signed. Prior to final approval of the construction drawings, the developer must pay the outstanding balance for the plan check work and meet the requirements on the "Developer's Required Items Checklist" (See Appendix 7).

100.6.6 District Signs Plans

The developer is required to obtain signatures from all other agencies. Original water and sewer plan Mylar's become the property of the District. After the District approves the plans they will be returned to the developer. After all signatures are received, the developer or their engineer must provide the District with the approved plans and a digital copy of the plans per the submission criteria described in Section 300.15.2.1. After the blueprints, Mylar's and the submittal items are received by the District the project will be released for construction, and the inspection by the District can be coordinated by the District Engineer or his/her designate.

100.6.7 Construction Acceptance

When construction has been successfully completed and the final inspections have been performed, the District's Plan Check Engineer will notify the developer. Following final inspection, the developer will be required to prepare the Bills of Sale, and Statements of Construction Cost, to provide for the transferring of the facilities to the District. Details of this procedure are included in Section 100.11, herewith.

The developer shall be responsible for the cost of installation and the installation of all water, sewer, and recycled water facilities within and/or adjacent to his development to serve his/her development. All construction must comply with the District's standards. The developer shall be responsible for any and all repairs or replacements required to the installed systems as required in section 100.10 "Guarantees"

100.6.8 Record Drawings

Record drawings should be submitted in accordance with Section 300.20.

100.7 SINGLE LOT PROJECTS

Single lot developments are handled in a manner similar to Section 100.6, and may not include the transferring of facilities to MCWD. Single lot projects principally involve the submittal of a Residential Connection Form and Permit Application, or the Commercial Connection Form and Permit Application be accompanied by the appropriate plans and required fees. When the plans depicting the service connections are approved, the Construction Permit Application (See Appendix 8) will be prepared in preparation for construction inspection. In addition, the developer will receive a statement of all applicable connection fees, meter fees, capacity charges, plan review, inspection fees and any other required fees and charges, including, if applicable, bonds and insurance.

Once the Residential Connection Form and Permit Application, or the Commercial Connection Form and Permit Application is approved and the installation cost has been estimated by the District and paid by the applicant, the meter request is forwarded to the District's Customer Service Desk for installation of the meter. The District will inspect the completed installation and, if satisfactory, the District Engineer or his/her designate Plan Review section and Customer Services will be notified that the job is complete.

100.8 ADDITIONS OR RENNOVATIONS TO EXISTING STRUCTURES

This includes all applicants with or without an existing water meter or sewer lateral to its business, structure, or property. Prior to receiving water and sewer service, all customers must complete either the Residential Connection Form and Permit Application, or the Commercial Connection Form and Permit Application. The applicant must pay all applicable fees and charges, and if required, capacity charges prior to receiving service. The applicant must also comply with all other applicable design, construction and District Code requirements prior to receiving service.

100.9 RESPONSIBILITY FOR FURNISHING MATERIAL AND INSTALLATION

Installation of a development's domestic water, sewer and/or recycled water facilities and any other required off-site facilities will be the obligation of, and constructed at, the developer's expense. The applicant shall cause all installation work to meet the District's "Standard Plans and Specifications," and upon final acceptance, transfer ownership of the off-site facilities to the District.

100.10 WARRANTEES

As set forth in the Agreement, the applicant shall be responsible for any and all repairs and replacements for a period of one year from the date of acceptance by the District Board of Directors (see section 300.25 for more details) without expense whatsoever to the District; ordinary wear and tear and unusual abuse or neglect excepted. In the event of failure to comply with the aforementioned conditions, the District will use securities posted by the developer to have the defects repaired and made good. The cost and charges shall include attorney fees, staff time, and other incidental costs involved thereof.

100.11 DEDICATION OF FACILITIES

Upon completion and final inspection of all work, the applicant shall file a request at least thirty days prior to a regular Board of Directors meeting for dedication and formal acceptances. The applicant shall also furnish the District a report of actual costs (Appendices 9A, 9B and 9C) of said facilities, a proper bill of sale (Appendices 10A, 10B and 10C), and record drawings ("as-builts") of the facilities upon compliance with these requirements. Upon said acceptance, the District will give approval for the release of bonds held by the District or posted to the city or county for the construction of domestic water, sewer and recycled water

facilities.

END OF SECTION

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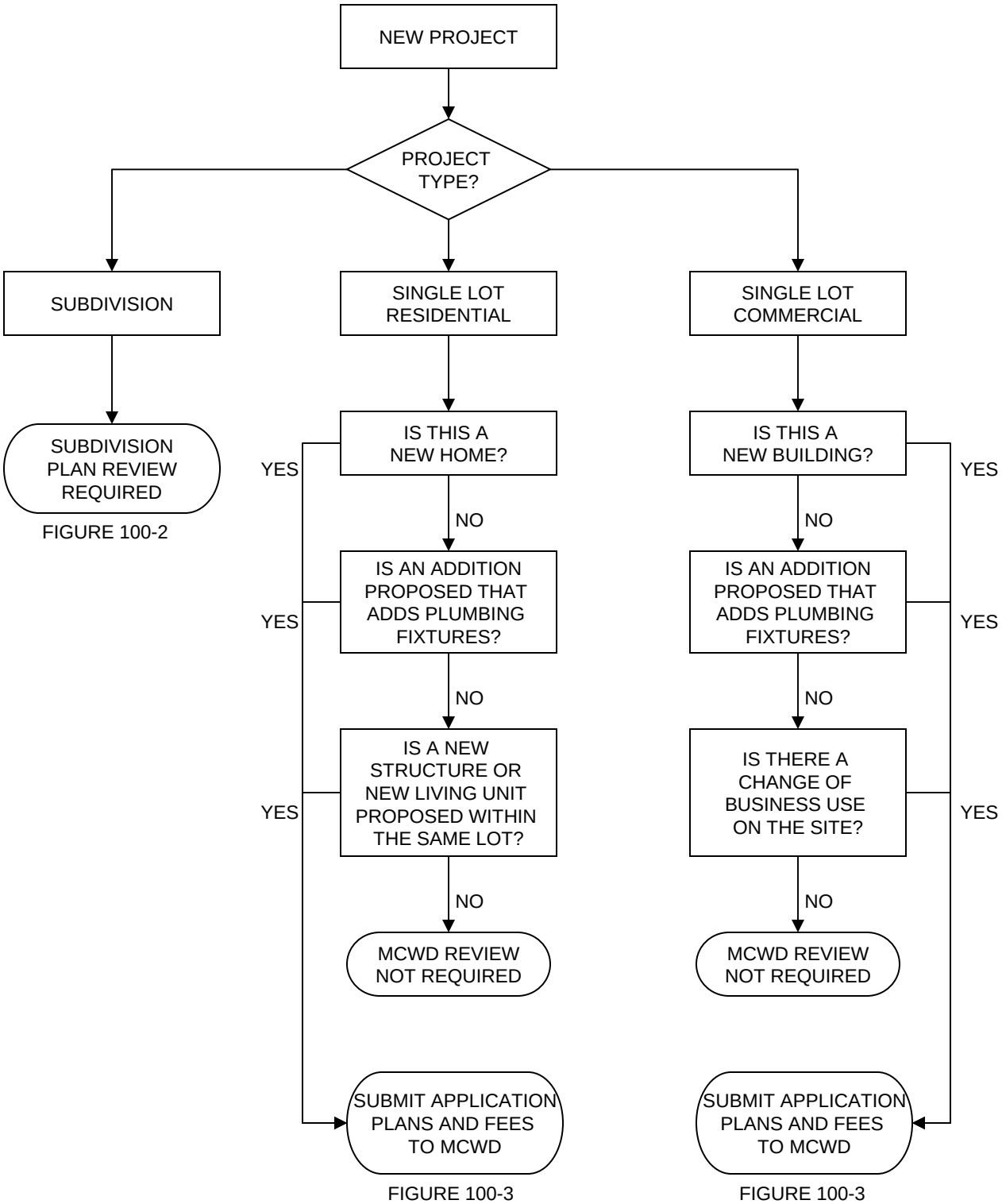


FIGURE 100-2

FIGURE 100-3

FIGURE 100-3

APPROVED BY DISTRICT ENGINEER DATE 10/2007	MARINA COAST WATER DISTRICT	**MARINA COAST WATER DISTRICT** **GENERAL APPLICATION PROCESSING FLOW CHART**	FIGURE 100-1 SHEET 1 OF 1

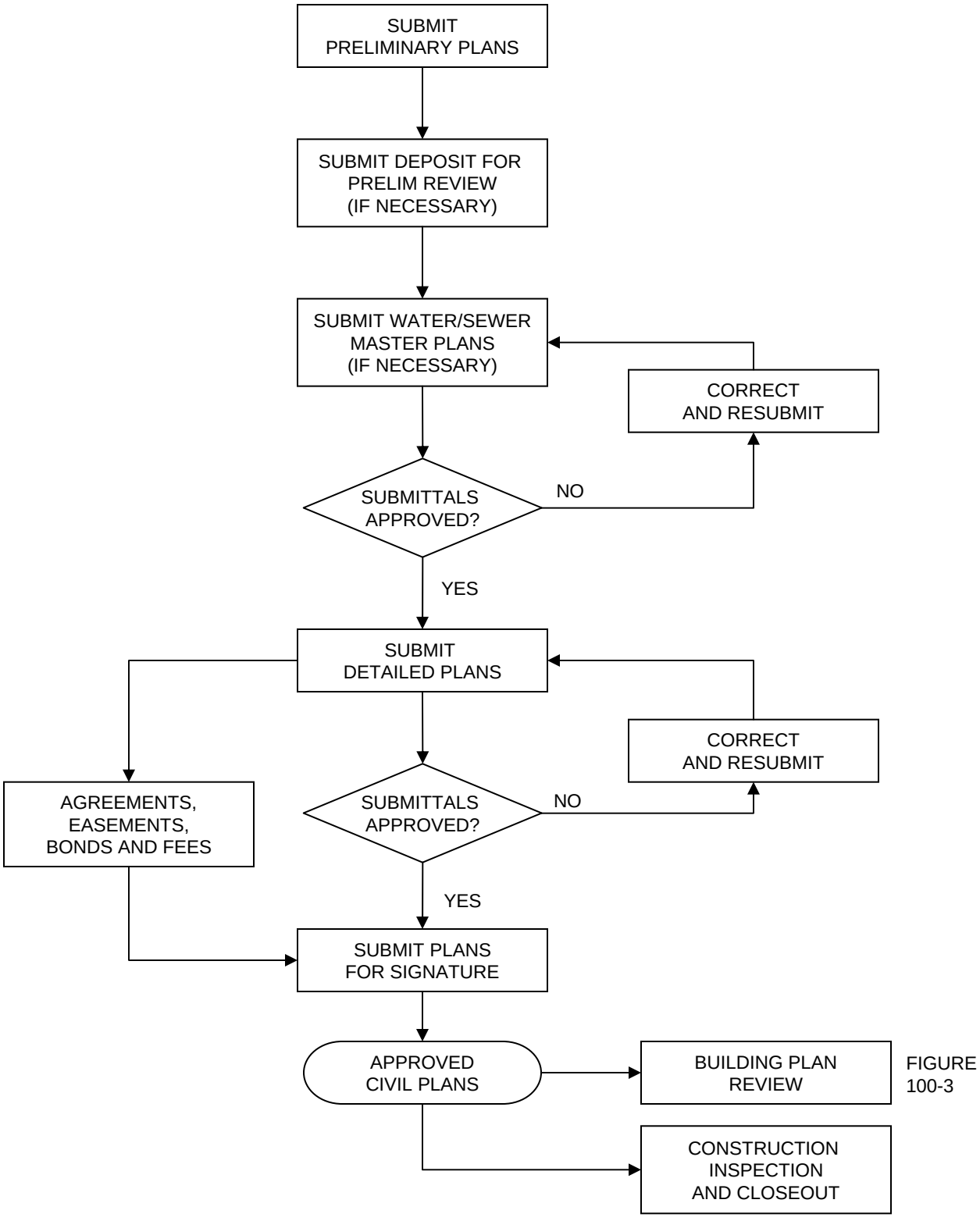


FIGURE 100-4

APPROVED BY DISTRICT ENGINEER DATE 10/2007	MARINA COAST WATER DISTRICT	**MARINA COAST WATER DISTRICT**	FIGURE 100-2
		SUBDIVISION PLAN REVIEW PROCESS	SHEET 1 OF 1

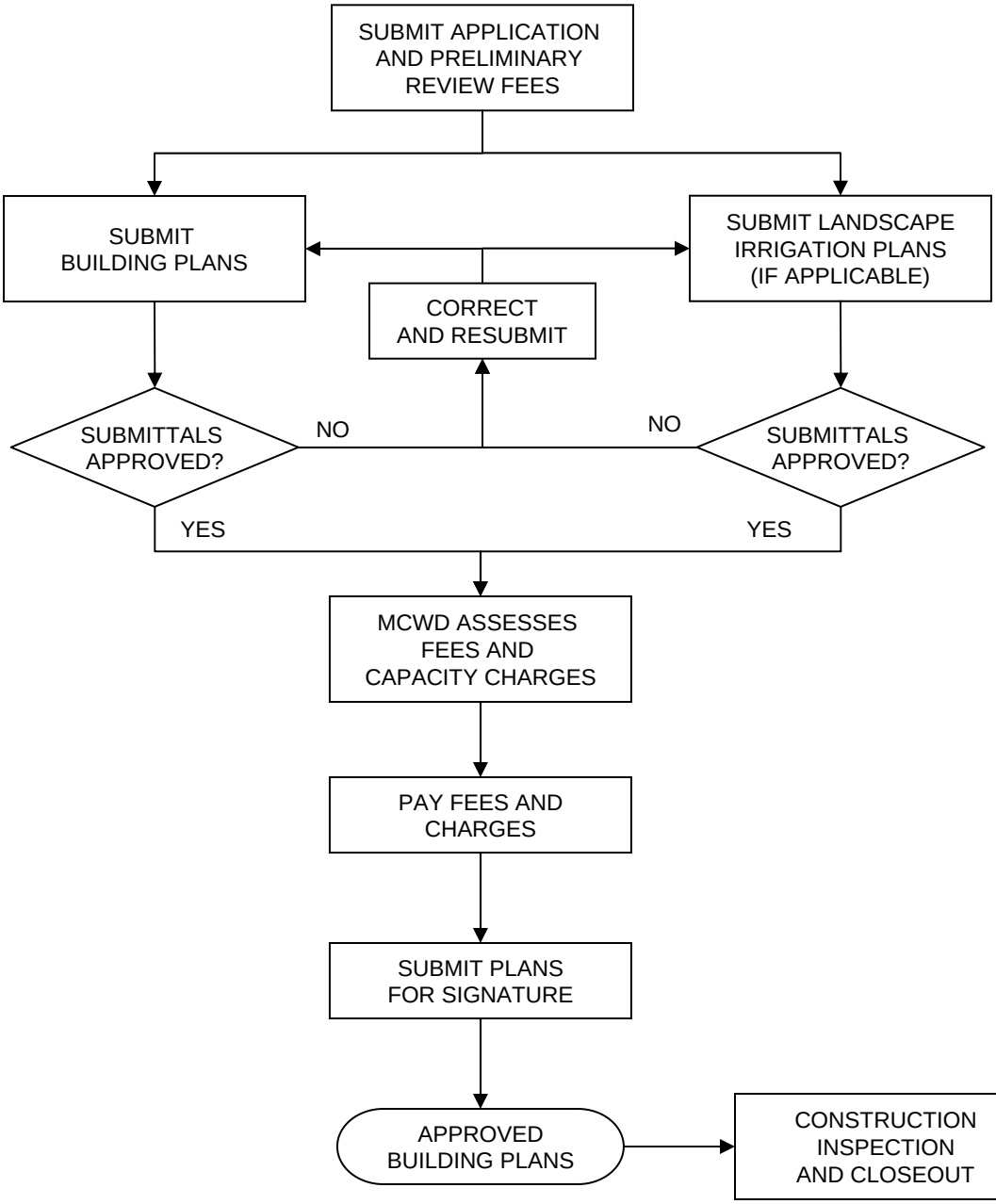
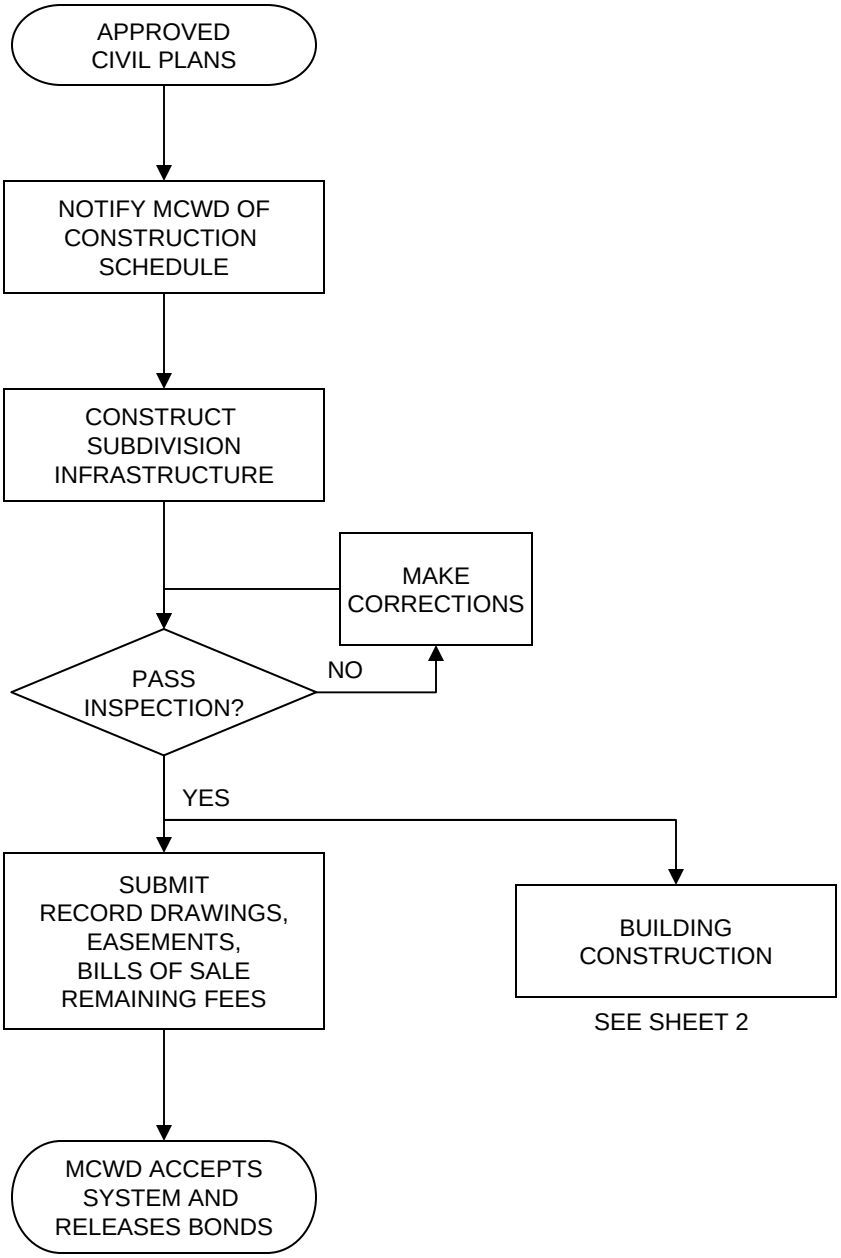
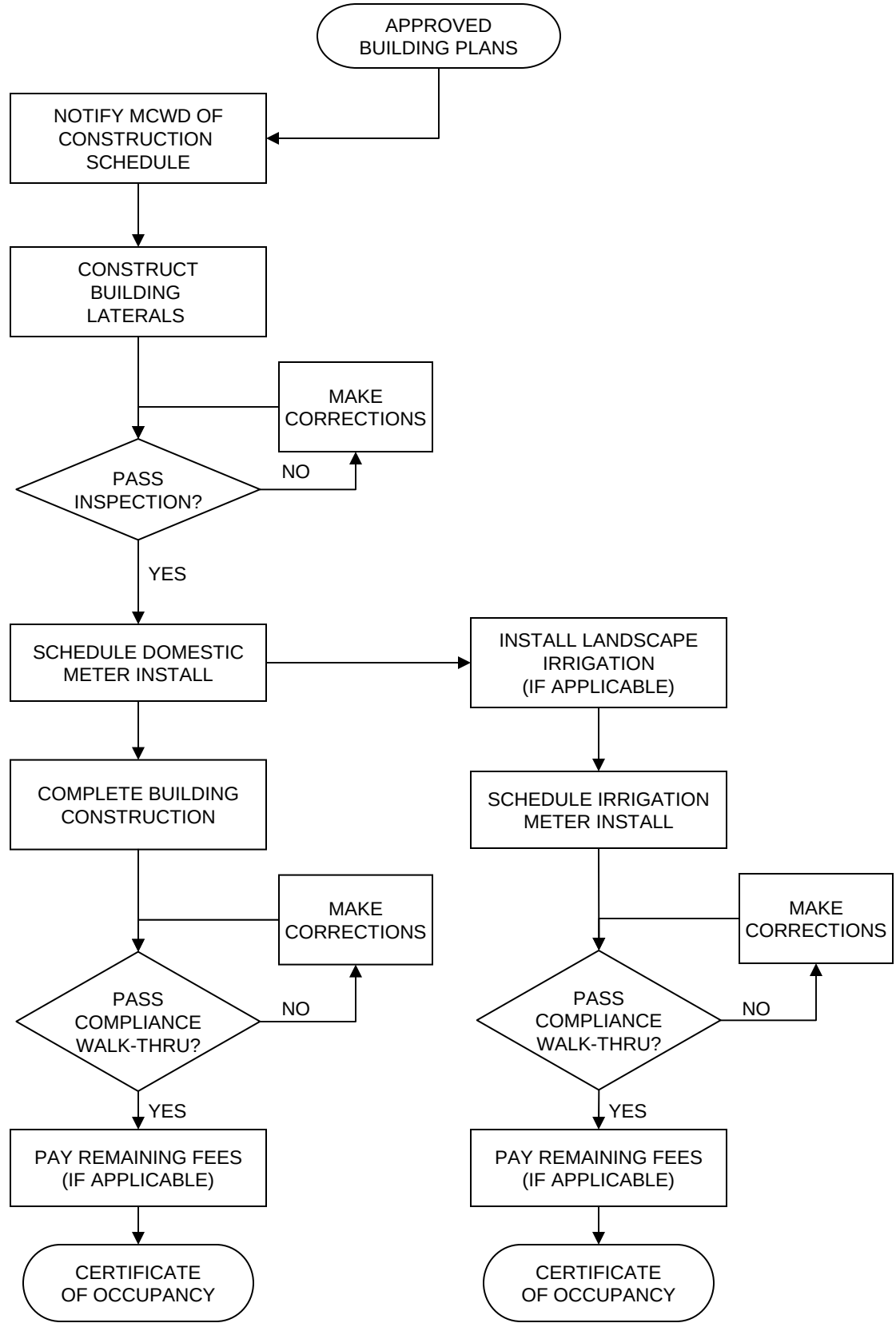


FIGURE 100-4

APPROVED BY DISTRICT ENGINEER DATE 10/2007		**MARINA COAST WATER DISTRICT**	FIGURE 100-3
		BUILDING PLAN REVIEW PROCESS	SHEET 1 OF 1



APPROVED BY DISTRICT ENGINEER DATE 10/2007		**MARINA COAST WATER DISTRICT**	FIGURE 100-4
		CONSTRUCTION INSPECTION AND CLOSEOUT PROCESS	SHEET 1 OF 2



APPROVED BY DISTRICT ENGINEER DATE 10/2007	MARINA COAST WATER DISTRICT	**MARINA COAST WATER DISTRICT** **CONSTRUCTION INSPECTION AND CLOSEOUT PROCESS**	FIGURE 100-4 SHEET 2 OF 2

SECTION 200

DISTRICT CHARGES
CONNECTION FEES, AND OTHER COSTS

200.1 GENERAL

Fees and charges for connection to District facilities are detailed in Appendix 11. All applicable fees and charges shall be paid by the applicant prior to the approval of plans, installation of individual services, or at other times as requested by the District. A worksheet to assist with the determination of fees and charges is provided for in Appendix 12. Some examples are noted in Appendix 13.

The District will send a draft copy of the final fee and charge estimate to the developer.

200.2 WATER AND SEWER RATES

These changes will be billed for water, sewer, construction water and meter use as listed in the District's schedule of rates and charges available for review at the District office.

200.3 PLAN REVIEW AND CONSTRUCTION INSPECTION FEES

Plan review fees are determined based on the type and size of the proposed project. The plan check and construction inspection fees are as determined by the District and subject to confirmation and adjustment prior to meter installation.

200.3.1 Submit Preliminary Plan Review Fees (if required)

Depending on the extent of preliminary plan review required, District staff may require a fee to cover staff time and or costs for consultant review of plans before preliminary level or concept level plan check begins. In any case, the Plan Review Fee must be submitted prior to District's staff reviewing any preliminary planning documents.

200.3.2 Plan Review Fees

The following fees are in addition to other fees discussed in this section and shall be submitted with first Plan Check.

Plan review is performed at-cost, with an initial base fee and additional fees assessed to meet the actual cost of the review. For single lot projects, which include renovations; the fee is $200 per residential unit and $400 per commercial unit. For small single lot projects that include new residential or commercial structures, the fee is $500 per unit. For large projects that include large residential or commercial structures and subdivisions, the fee is $500. For subdivisions and large projects, the minimum plan check fee is two percent (2%) based on the preliminary plan submittal information and the District's Bond Worksheets (See Appendix 6). Additional plan review fees are determined by the District Engineer and are subject to change pending the District Board of Director's annual approval of the budget.

200.4 Construction Inspection Fees

Inspection is performed at-cost, with an initial base fee and additional fees assessed to meet the actual cost of the inspection. For small residential or commercial single lot projects, the construction inspection fee is

$400 per unit. For large residential or commercial single lot projects and subdivisions, the construction fee is $500 per unit plus three percent (3%) of water, recycled water and sewer construction costs. In no case shall construction inspection fees be less than actual construction inspection cost. These fees are subject to change pending District Board of Director's annual approval of the budget.

200.5 METER CHARGES

The Applicant of all residential or commercial/industrial properties shall be required to connect to the District's infrastructure and utilize District water meters.

The developer will pay for and the District will furnish all meters up to and including 3-inch in size. All meters must be applied for through the District's Customer Service Department. The schedule and cost of these meters is available upon request at the District office.

200.6 FINAL ESTIMATE OF FEES AND CHARGES

Upon receiving the corrected utility plans for a second plan check, quantities for the bond worksheet and the applicant's letter requesting domestic water, sewer and recycled water service, the Plan Check Engineer will compute the required development fees, based on the then governing District Code.

The District will send a draft copy of the final fee and charge estimate to the developer.

200.7 TEMPORARY WATER SERVICE PERMITS

Construction water may be used provided the Applicant provided completes the Temporary Water Service Application (See Appendix 14) and complies with Section 300.20.4.

The location of the fire hydrant must be approved by the District Engineer.

200.8 OTHER FEES AND CHARGES

Other fees and charges include, but are not limited to, meter connection fees, capacity charges, private fire hydrant charges, temporary water service, hydrant meter charges, bulk water service charges, equalization fees, fire flow testing and backflow/cross connection control, and inspection fees.

END OF SECTION

SECTION 300

DESIGN AND INSPECTION PROCEDURES

300.1 GENERAL

The District reviews plans for developments that generally include a single lot development, i.e. like a residence or a commercial building, or a sub-division development, or modifications to exisisting structures. All proposed developments may include the need to review conceptual or preliminary plans. This section outlines the submittal requirements for various plans.

300.2 CONCEPTUAL PLANS

Two sets of Water/Sewer Conceptual Plans are to be submitted to the District Engineer or his/her designee by the applicant or the applicant's engineer at least thirty days before filing any Tentative Map.

It is the recommendation of the District, but not a requirement, that the local Fire Authority review a copy of the Conceptual Plan.

300.3 SUBDIVISION MASTER PLANS

Subdivision Master Plans include the Subdivision Water and Sewer Master Plans as noted below. These plans are required for all projects that require use of existing or proposed infrastructure.

300.3.1 Subdivision Water Master Plan

***Subdivision Water Master Plan Approval*:** The District Engineer or his/her designee will review for approval the water system master plan for the tentatively planned development. The major elements to the Subdivision Water Master Plan shall include, but not limited to:

1. Condition Assessment. This is applicable if existing water and sewer infrastructure is planned for continued use. This Assessment must identify the useful life of the existing infrastructure and propose corrective action to extend the useful life of the infrastructure. Applicant should also refer to Marina Coast Water District's In-Tract Policy.
2. Existing transmission main locations and sizes
3. District's design criteria (Section 400)
4. In-tract Hydraulic Model for potable and recycled systems in format acceptable to the District.
5. City and/or County fire flow requirements. Whether or not general Fire Authority criteria have been met. It is the responsibility of the developer to meet with the Fire Authority separately, to determine specific Fire Authority concerns
6. Improvement Plans. These plans describe the improvements necessary as a result of the project requirements and may address both in-tract and off-site improvements.
7. Construction Phasing Plan , if applicable.

The District reserves the right to change proposed domestic water main sizes after considering the above criteria. The developer will be required to improve the existing distribution system, if necessary, to support the proposed project

300.3.2 Subdivision Sewer Master Plan

Subdivision Sewer Master Plan Approval: The District Engineer or his/her designee will review for approval the sewer system master plan for the tentatively planned development. The major elements of the subdivision sewer master plan are:

1. Condition Assessment. This is applicable if existing water and sewer infrastructure is planned for continued use. This Assessment must identify the useful life of the existing infrastructure and propose corrective action to extend the useful life of the infrastructure. Applicant should also refer to Marina Coast Water District's In-Tract Policy.
2. Existing trunk sewer locations
3. District's design criteria (Section 500)
4. Slope and size of sewer collection mains and number of lots to be served
5. In-tract Hydraulic Model in format acceptable to the District.
6. Improvement Plans. These plans describe the improvements necessary as a result of the project requirements and may address both in-tract and off-site improvements.
7. Construction Phasing Plan, if applicable.

300.3.3 Recycled Water System Conceptual Development Plan

See Section 600.

300.3.4 Landscape Irrigation Plan Information

See Section 700.

300.4 SUBDIVISION CONSTRUCTION PLANS

300.4.1 First Plan Check Requirements

The Applicant/Engineer shall submit the following items for first review of residential/ commercial/industrial subdivisions:

1. 2 sets of water/sewer/recycled water utility improvement plans with job specific specifications.
2. 2 sets of Tract/Parcel Map showing gross acreage.
3. 1 set of grading plans.
4. Engineer's quantity estimate for water, sewer and recycled water system. Each system shall be listed separately.
5. Transmittal from applicant's engineer requesting the commencement of District plan check procedure. The transmittal shall be signed by the responsible engineer in charge, showing his/her Professional Engineers registration number. Attach plan check fee and deposit.
6. Improvement plans shall be prepared for domestic water, sewer, and recycled water facilities. Sheet size shall be ANSI-D (22-inch by 34-inch) or ARCH-D (24-inch by 36-inch), no exceptions.
7. Plan Review Checklist initially completed by the Designer (see Appendix 5).

The improvement plans will be checked against the tentatively approved subdivision water master plan and subdivision sewer master plans, recycled water system conceptual development plan, and the minimum design standards. Tract maps and parcel maps will be checked against improvement plans for the required easements. After the first plan check, District will return one red-lined set each of the utility improvement plan and the tract/parcel map. The returned sets will note any specific variations from the basic requirements. Applicant/Engineer shall return the District's red-line set.

300.4.2 Detailed Plan Requirements

All plans submitted to the District Engineer or his/her designee Review section for plan checking and approval of domestic water, sewer and/or recycled water facilities will be submitted on ANSI-D or ARCH-D size. These plans shall also conform to the jurisdiction having authority over the project; and the following requirements.

1. Title Sheet:

   A. Project Title or Development Tract

   B. Index Maps

      1) Scale - 1" = 100'
      2) Show: Water mains - size, fire hydrant, and valves and existing facilities Sewer mains -size, flow direction, manholes, (number M.H.) and existing facilities, building/D.U./lots/"footprints."
      3) North arrow
      4) Street names
      5) Legend of symbols and lines
      6) Show easements for water, sewer and irrigation facilities

   C. Location map; showing general area with project noted

   D. Signature block - the District's approval of facilities (form as provided by the District).

   E. Fire Marshal approval

   F. Bench Mark; description and latest elevations

   G. City Engineer signature block

   H. Survey horizontal control

   I. Name, address, and phone number of engineering firm
   Name, address, and phone number. of developer
   Legal description of property (Tract/Lot, Parcel Map No.)

   J. Quantity estimates may appear on Title Sheet. Water, sewer and recycled water facilities to be called out separately. Labeled and not mixed together.

   K. Index of sheets

L. Revision block

M. General notes

N. Utility, addresses, and phone numbers, including but not limited to - Gas, Telephone, Power, Cable T.V., Water, Sewer, and Storm Drain

O. U.S.A. Dig Alert notice per Section 4212/5217 of the Government code

2. Second Sheet (Normally Sheet 2 includes):

A. Quantity estimates (if not shown on Title Sheet)

B. MCWD Standard Notes (See Sections 400.12, 500.18 and 600.5.7)

C. Construction notes

D. Detail drawings

3. Plan and Profile Sheets:

In addition to MCWD standard plan S-13, plan and profile sheets are required for all water, sewer and recycled water pipelines, as follows:

A. Scale –1-inch = 40-feet

B. The plan and profile should be on same sheet if possible and aligned. Sewer profile may appear on a separate sheet.

C. Existing domestic water, sewer and recycled water facilities adjacent to development must be shown

D. Easements dedicated to the District for domestic water, sewer and recycled water facilities must appear on plans

E. Building/D.U. pad elevation

F. Water, sewer, recycled water system and storm drain crossing elevations

G. Provide a key map on each sheet at a scale of 1-inch = 400 feet

300.4.3 Survey Datum

Prepare drawings using the California Coordinate System of 1983 (CCS83), Zone 4. Vertical datum shall be identified on the plans as NGVD 29 or NAVD 88. When connecting to existing District facilities, be aware that most record drawings are on NGVD 29.

300.4.4 CAD Requirements

1. Drawings submitted to the District shall be prepared in AutoCAD, version 2000 or later.

2. Water, sewer and recycled water systems shall be drawn using the following layer naming convention.
   a. Pipe layers shall be named as "(use)_(material)_(pipe diameter)". For example, label an 8-inch PVC water main as "W_C900_8", and label an 8-inch PVC sewer main as "SS_SDR35_8".
   b. Appurtenance layers shall be named as "(system)_(item type)". For example, label a gate valve on a potable water main as "W_GV", and label a sewer manhole as "SS_MH".
   c. Place line work in the appropriate layers.
   d. Refer to the table below for abbreviations.

Systems	
Sanitary Sewer	SS
Reclaimed Water	RW
Potable Water	W
Abandoned	ABANDONED
Pipeline Materials	
High Density Polyethylene	HDPE
Ductile Iron	DI
Polyvinyl chloride	PVC
C900 PVC Water Main	C900
SDR 35 PVC Sewer Main	SDR35
Copper Service Lateral	CU
Polyethylene Service Lateral	PE
Force Main	FM
Appurtenances	
Fire Hydrant	FH
Manhole	MH
Meter	METER
Valve	
Check Valve	CV
Pressure Reducing Valve	PRV
Pressure Staining Valve	PSV
Butterfly Valve	BV
Gate Valve	GV
Blowoff Valve	BOV
Normally Closed	NC

3. Appurtenances shall be inserted as blocks with attributes. Standard attribute tables are as follows:
   a. Manhole/Cleanout

Block Name	Use layer name (i.e., SS_MH)
Rim	Elevation
Invert 1	(Elevation)(Direction)
Invert2	(Elevation)(Direction)
Invert3	(Elevation)(Direction)

Invert4	(Elevation)(Direction)
Invert5	(Elevation)(Direction)
Installation Date	dd.mm.yyyy
Comments	

Elevation is in feet.
Direction is defined as: N, S, E, W, NE, NW, SE, OR SW.

b. Valve or Meter

Block Name	Use layer name (i.e., W_GV)
Size	Inches
Installation Date	dd.mm.yyyy
Comments	

300.5 COMMERCIAL/INDUSTRIAL CONSTRUCTION PLANS.

In addition to the requirements described in Section 300.4, the following is required for all commercial or industrial developments:

300.5.1 Domestic Water Services

1. Site Utility Plans Showing:

   A. Property lines

   B. "Footprint" of building

   C. All on-site public and private fire hydrants

   D. Stamped/signed by the local agency Fire Marshal

      1) Services for other than residential development, may be required to have back flow prevention devices (minimum double check valve), as determined by the District.
      2) Items required to make application for domestic service.

   E. Either two complete sets of Plumbing Plans stamped by the city having jurisdiction, or two complete sets of Plumbing Plans, along with a letter from the developer or his/her agent requesting a _____ meter, not to exceed ____ gpm, to serve ____(Company Name)__ at __(Address)__.

   F. Domestic irrigation requires a site utility plan and a letter similar to above. It may be included in letter for domestic service.

   G. Address to be served

   H. All fees, stipulated in the agreement, must have been paid.

300.5.2 Fire Service Requirements

1. All fire services will require an approved backflow prevention assembly per MCWD Standard Plan W-4, 5 & 6.

300.5.3 Recycled Water Service Requirements

1. Landscape plans must be reviewed and approved by District.

2. MUST have an address for each service

3. One approved landscape plan -- showing each service's point-of-connection to District main

4. All fees, stipulated in the agreement, must have been paid.

5. The use of recycled water is mandatory per Section 4.28 of the District Code. It is the policy of the District that non-domestic water must be used within the District whenever it is available in conformance with Sections 13550 and 13551 of the Water Code of the State of California.

300.5.4 Grease Traps, Grease Interceptors or Other Devices

A food service establishment or whenever more than (10) Sewer Equivalent Dwelling Units (EDU) is discharged into MCWD sewer conveyance system any other business discharging grease, oil or other similar material shall have an operable grease trap, grease interceptor or other comparable device(s) as determined by the District Engineer.

The requirements for design, installation, and maintenance of grease traps, grease interceptors, or other devices are found in Appendix 15. A properly sized interceptor or trap shall be considered first, in conformity with the sizing chart set forth in the Appendix 15. Should space limitations or other exceptional circumstances prevent their installation, the District may grant exceptions to the requirement of grease traps or grease interceptors in this section.

All drains from food preparation and clean up areas including, but not limited to, pre-wash sinks, floor drains, food waste disposal units, pots and pans sinks, scullery sinks, and garbage can wash areas shall be connected to such trap or interceptor. Toilets, lavatories, and other sanitary fixtures shall not be connected to any grease trap, grease interceptor, or comparable device.

Suspension or Termination of Health Permit. The District shall have the discretion to request the Monterey County Health Department to terminate or cause to be terminated the health permit of any user if a violation of any provision of this chapter is found to cause a condition of contamination, pollution, nuisance, or other threat to public health or safety.

300.6 ADDITIONAL REQUIREMENTS AND STANDARDS

300.6.1 District's Regulation Regarding Cross Connection

All domestic water services shall be subject to the provisions of section 3.28 of the District's Code of Ordinances. See section 400.11 for detailed requirements.

300.6.2 Domestic Water Facilities

See Section 400 for detailed specifications regarding the design and construction of domestic water facilities.

300.6.3 Sanitary Sewer Facilities

See Section5600 for detailed specifications regarding the design and construction of sanitary sewer facilities.

300.6.4 Recycled Water Facilities

See Section 600 for detailed specifications regarding the design and construction of recycled water facilities.

300.6.5 On-Site Irrigation Systems

See Sections 700 for the design criteria and detailed specifications regarding the construction of on-site potable or recycled water irrigation systems.

300.7 PROVIDING REQUIRED EASEMENTS

For water and recycled water facilities outside of the public right-of-way, an easement is required for construction and/or maintenance of water facilities, including but not limited to, water mains, hydrants, meter vaults, and detector check vaults. Minimum easement width shall be twenty-feet for water mains, and five-feet on all sides for meters, fire hydrants, meter vaults, detector check vaults, and other appurtenances, unless otherwise determined by the District. Actual width shall be twice the average pipe depth, rounded up to the nearest 10 feet.

For sewer facilities outside of the public right-of-way, an easement is required for construction and/or maintenance of sewer facilities, including but not limited to, sewer lines, manholes, and lift stations. Minimum easement width shall be twenty-feet for sewer lines, preferably crossing a lettered (non-residential) lot. Wider easements may be necessary if sewer depths are greater than eight feet. Actual width shall be twice the average pipe depth, rounded up to the nearest 10 feet.

An easement running parallel with a lot line shall not be split so as to occur on two lots. The easement, title report, and legal descriptions with accompanying sketch and plans shall be prepared by the applicant's engineer, two copies of which shall be sent to the District Engineer, or easements for the District shall be shown on a tract or parcel map. Easement descriptions shall be in a form acceptable to the District and will be checked by the District Engineer. Easements shall also be shown on the construction plans. The District will approve the plans only after all required easements have been granted to the District together with any necessary partial reconveyance or subordination agreements. Exhibits will be 8-1/2-inch by 11-inch, no exceptions.

Along public streets a three or five foot utility parallel easement on private property for District may be required depending upon public right-of-way widths and sidewalk locations.

Applicant shall submit two copies of the easement description and sketch to the District for review. If acceptable, the applicant shall furnish two additional copies of the description and sketch, signed by a registered Professional Engineer or Surveyor along with a completed "Grant of Easement to Marina Coast Water District" form (see Appendix 13 for sample), a current (within 30 days) title report of the property reflecting all deeds of trust and encumbrances, and subordinations signed by the trustees shown on the title report. If not acceptable, the District will return the documents with the required corrections noted.

All blanks in the documents, such as project identifications, title report number, map and book numbers and pages, dates, etc., must be filled in. The easement sketch must contain a vicinity map showing the location of the easement in relation to major streets and highways, as well as a sketch depicting the easement boundaries with bearings, distances, points of beginning, north arrow, and any other information required by the District.

NOTE: Approval by the District will not be given for the in-tract water or sewerage systems until all easements have been obtained.

300.8 COST ESTIMATE

The developer's engineer shall provide the quantities, to allow the District to project costs for the water, sewer and recycled water facilities to be dedicated to the District per the Bond Worksheet (Appendix 6). The items listed will include, but will not be limited to pipes, valves, meters & appurtenances, connections, hot taps, and facilities construction.

300.9 FIRE AUTHORITY APPROVAL

After the First Plan Check by the District, it will become the responsibility of the applicant's engineer to have the local Fire Authority approval before submitting them for a second plan check. Fire flow requirements for the development shall be submitted with the second plan check submitted. The District reserves the right to require additional fire protection or modify water facility sizes as deemed necessary.

300.10 VARIANCES

If the site or project conditions require a deviation from these design requirements, a variance must be requested using the form at Appendix 18. Provide a detailed explanation of why the variance is being requested and how the proposed change meets the intent of the District standards. Most design variances may be approved by the District Engineer. Variances to standards set out in the District Ordinances must be approved by the Board of Directors.

300.11 SECOND PLAN CHECK

Upon satisfactory completion of items 300.1 through 300.9 the developer's engineer shall submit plans for the second plan check along with the District’s red-line set from the first plan check. This submittal will be checked against the corrections requested in the first plan check and the District’s minimum design standards. Failure to return the district’s red-line set will result in additional review and fees, and time to complete this review.

300.11.1 Corrected Plans Returned To Developer's Engineer

Upon review of the improvement plans for the total development, one red-lined copy will be returned to the applicant's engineer, showing any corrections and/or comments.

Upon receiving the corrected utility plans for a second plan check, final fees will be collected based on Section 200.5.

300.12 SURETY

The Developer will provide a surety bond, a letter of credit, a certificate of deposit, or other form of surety acceptable to the District. This surety shall be of a type which is automatically renewed every year, at the developer's expense, until released by the District.

300.13 FINAL PLANS

Upon completion of any remaining items noted in the plan check, the developer's engineer shall submit two bond or blue line sets of improvement plans, along with the red line mark up, for final verification.

300.14 FINAL EASEMENTS

300.14.1 Submittal

The developer shall submit easement documents, which incorporate all changes caused by the review process, in accordance with Section 300.3.

300.14.2 Verification

The developer's engineer will verify that the easements as listed in the easement documents remain valid. The engineer will then submit the final easement documents and the final title report for recordation.

300.15 FEES

The developer shall pay all fees as determined in the Construction and Transfer of Water, Sewer, and Recycled Water "Infrastructure Agreement" between the developer and the District and as specified in the District's Water Code and in Section 200 herein.

300.16 PLAN APPROVAL

Utility improvement plans must have the District Engineer or his/her designee signature before any construction by the applicant begins.

300.16.1 Prerequisites for Signing Plans

1. "Infrastructure Agreement" must be signed by developer, and approved by the District's Board of Directors.

2. Required signed easement documents or the Tract/Parcel map must have been accepted for dedication by the District. The District will prepare an easement Certificate of Acceptance (Appendix 13B). The easement documents must have been recorded.

3. All fees and charges must be paid in full by the applicant.

4. Signatures of City Engineer and Fire Marshall, when required.

300.16.2 District Signing Plans.

Submittal for Signature: Once the requirements detailed in Sections 300.1 through 300.14 are satisfied, the applicant shall submit to the District the following:

1. One Master Copy of the utility plan on Bond or Mylar, as required by the applicable land use jurisdiction, which will be signed and returned, and two bond or blue-line sets for District use, shall be delivered to the District Engineer.

2. One set of final development plans including:

   A. Horizontal control plot plan

   B. Street improvement plans

3. An electronic copy of the drawings in AutoCAD on a CD-R.

Notification: District will notify applicant's engineer once the plans have been signed.

300.16.3 Signed Utility Plans Both District And City / County

Obtain approvals of the applicable land use jurisdiction prior to construction. Two copies of Utility Plans signed by all applicable agencies shall be furnished to District at least two working days before the preconstruction conference and commencing work.

300.16.4 Permit Expiration

Plans will be valid for two (2) years from the date of District approval. If construction has not started within one year from date of approval, the signed plans shall become "null and void." The District will require rechecking of the plans and it reserves the right to charge additional plan check fees.

300.16.5 Re-permit Letter

In the event that construction does not start, and the approval could become null and void, as described in Section 300.15.3; the letter shown in Appendix 17 may be submitted by the developer's engineer, by registered mail, to request a one-year extension of the approval.

300.17 ORDER OF PRECEDENCE OF STANDARDS

In the case of conflict between the specifications, drawings, and permit requirements, with regard to construction of facilities, the following order of precedence will apply: The permit requirements of other agencies, special details, plans, special conditions, District standard plans, technical specifications, general conditions, the *Standard Specifications for Public Works Construction* and the Cal Trans Manual.

Figured dimensions of the drawings shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified or as directed. Full-size details shall take precedence over scale drawings as to shape and details to construction. Scale drawings, full-size details, and specifications are intended to be fully cooperative and to agree; but should any discrepancy or apparent difference occur between plans and specifications, or should errors occur in projects being constructed by others affecting the work, and the contractor proceeds with the work affected without instruction from the District, the contractor shall be fully responsible for any resultant damage or defect.

300.17.1 Permit Requirements

The permit requirements, as approved by the agency having jurisdiction, will take precedence over the following details and standards with regard to the construction of water facilities.

300.17.2 Special Details

The special details, as approved by the signature of the District Engineer, will take precedence over the below listed details and standards with regard to the construction of water facilities.

300.17.3 Plans

The plans, as approved by the signature of the District Engineer, will take precedence over the below listed details and standards with regard to the construction of water facilities.

300.17.4 Special Conditions

The special conditions, for the specific project and incorporated into the project contract documents, as approved by the Districts Board of Directors, will take precedence over the below listed standards with regard to the construction of water facilities.

300.17.5 District Standard Plans

Districts' standard plans, as approved by the signature of the District Engineer, will take precedence over the below listed details and standards with regard to the construction of water facilities.

300.17.6 District Standard Specifications

Districts' standard specifications, detailed below, as approved by the Board of Directors, will take precedence over the below listed standards with regard to the construction of water facilities.

The "Standard Plans and Specifications for the Construction of Domestic Water, Sewer and Recycled Water Facilities" are incorporated herein by this reference. Copies may be obtained from the Marina Coast Water District, website at www.mcwd.org

300.17.7 Technical Specifications

The technical specifications of the District's "Standard Plans and Specifications of the Construction of Domestic Water, Sewer and Recycled Water Facilities," of the contract documents, as approved by the District's Board of Directors, will take precedence over the below listed standards with regard to the construction of water facilities.

300.17.8 The Caltrans Manual

The Caltrans Manual, as referenced by the District's details, standards and specifications, will take precedence over other standards, other than the District's standards, with regard to the construction of water facilities.

The "Standard Specifications," CALTRANS, are incorporated herein by this reference, copies of which may be purchased from the State of California, Department of Transportation, Central Publications Distribution Unit, P.O. Box 1015, North Highlands, California 95660.

300.17.9 Standard Specifications for Public Works Construction

The Standard Specifications for Public Works Construction as reference by the District's details, standards and specifications, will take precedence over other standards, other than the District's standards and Caltrans

standards, with regard to the construction of water facilities.

The "Standard Specifications for Public Works Construction," (Green Book), are incorporated herein by this reference. Copies may be purchased from Building News, Inc., 3055 Overland Avenue, Los Angeles, California 90034.

300.18 USE OF DISTRICT SEWERAGE FACILITIES

The District and the State of California have regulations on the types of wastes that are allowed to be discharged into its sewers in order to protect the facilities of the District and its operations to meet its discharge requirements. The section on the use of District sewerage facilities in the District's Code, including a separate supplement, sets forth these requirements. These provisions establish conditions under which certain users are required to obtain permits for use of District sewerage facilities. Applicants whose sewage discharges qualify them for a permit shall not be allowed to connect the building sewer to the District lateral sewer or sewer main until a written notification is provided by the District allowing the hookup. All users must comply with the discharge prohibitions established in the District's Code.

300.19 PROJECT CONSTRUCTION

300.19.1 Notification

Signed Utility Plans and notices shall be given to the District Engineer at least 48-hours before starting construction. Applicant shall also notify the city, and/or County inspector's prior to work within public right-of-way. For a complete review of the construction inspection requirements, please refer to the District's Construction Manual.

300.19.2 License Requirements

1. The applicant's contractor shall have a Class A or C-34 license.

2. The applicant's contractor shall have a business license to operate within the city having jurisdiction.

300.19.3 Preconstruction Meeting

A preconstruction conference is to be held no sooner that 24-hours before starting construction, at which will be present the applicant's contractor's working foremen and/or job superintendent, the applicant's engineer, the District inspector, and a representative from the District's O&M Department. The purpose of this meeting will be to answer any questions on District specification requirements, to obtain the contractor's construction schedule, and to discuss any known circumstances that might affect job installation.

Preconstruction Meeting Agenda: Without relieving the developer of responsibilities outlined elsewhere in the specifications; the District will present to the developer a list of requirements that may contain, but will not be limited to, the following items:

1. Order of work
2. Working hours
3. Site Accessibility
4. District facilities that will be taken off-line for construction
5. Startup operations of new facilities and other District facilities affected by the project

results.

6. Pressure test procedures and startup operations of new facilities and other District facilities affected by the project results.
7. Bacterial test results.
8. Record Drawings
9. Order of Precedence: The order of precedence as defined in Section 300.16 will be reviewed in the pre-construction meeting.

300.19.4 Curbs Installed Before Starting Water Facilities

It is a basic requirement of the District that the curbs be installed in-tract prior to starting the installation of water facilities. They act as positive grade control for setting services and fire hydrants. The District may approve an exception if the developer complies with the following requirements:

1. All requirements shall be met before the excavation of pipeline trenches.
2. The owner is to submit engineered drawings showing both the plan and profile of the proposed pipelines for District review and acceptance.
3. The owner is to provide survey staking. The proposed pipelines per the profile with cuts to flow line at a maximum of 25-foot stationing showing all horizontal and vertical grades breaks, tees, and valves, fire hydrant, blow-offs, air vacs, services, and all other appurtenances indicated on the plans.
4. Prior to backfill, the engineer shall certify line and grade of the pipeline and all the appurtenances and provide the District inspector with a copy of the certification.
5. In the event that a portion or any part of the pipeline and its appurtenances is not installed to the satisfaction of the District inspector, the owner agrees to expose and re-lay the pipeline accordingly.

300.19.5 Construction Water

Water for construction purposes is the temporary use of water from a connection to the District's water system. Connections could be from a fire hydrant or other direct connection as approved by the District Engineer or his/her designee. Below is the District's process to respond to and provide to requests for temporary water service from a fire hydrant.

Any customer that requires use of water from a fire hydrant must fill out the Temporary Service Application (See Appendix 14). That application will be processed by customer service. If the application is acceptable, then a fire hydrant meter will be provided to the applicant. The District may install the fire hydrant meter, but the security of the hydrant meter is the applicant's responsibility. The District will inspect the installation of the hydrant meter to assure it is both installed correctly and that it has the proper backflow device. The water shall be taken through a metered delivery and the developer shall pay all costs related thereto, including (but not limited to) District's standard deposit for temporary meter and actual costs of water used, pumping costs, loading, hauling and the use thereof. The developer shall make all arrangements for transporting the water to the construction site. Recycled water shall be used for construction purposes when possible.

The District will read the hydrant meters. The District will inspect the fire hydrant meter installation. If the installation is acceptable, the O&M Department will place a "lock-out" tag on the hydrant. This "lock-

out' tag indicates to the meter reader that the fire hydrant meter is properly installed with the correct backflow device. If the District finds uninspected fire hydrant meters, it shall immediately remove the hydrant meter from the hydrant.

At the conclusion of the temporary water service, the applicant must return the fire hydrant meter and the gate valve. Once the District inspects the fire hydrant to make sure it is in good working order, the hydrant meter and any other pertinent appurtenance and has received all payments for temporary water service fees and charges, then deposits may be returned to the applicant.

300.19.6 Inspection of Work

Access: All work shall be subject to inspection by the District and shall be left open and uncovered until approved by the District Engineer.

Domestic Water, Sewer and/or Recycled Water System Inspections: The Contractor shall not proceed with any subsequent phase of work until the previous phase has been inspected and approved by the District Engineer. Inspection may also be made at the following intervals of work. See District Construction Manual for more details.

1. Domestic and Recycled Water System:
   - A. Submit material list to District for approval.
   - B. Delivery of materials to job site and provide certificate of compliance to District.
   - C. Trench excavation and bedding.
   - D. Placing of pipe, fittings, and structures, including warning tape on recycled irrigation water main and service lines.
   - E. Pouring all concrete anchors and thrust blocks.
   - F. Placing and compacting the pipe zone back fill.
   - G. Backfilling balance of trench to grade. Compaction tests are to be performed by governing agency road departments in public right-of-way or by private soils consultant retained by the applicant and acceptable to the District in private streets and easements. Copies of test results shall be given to the District, and the governing agency, by the applicant for approval before final acceptance of the work. Backfilling and repaving shall be in accordance with the requirements of the city having jurisdiction.
   - H. Pressure testing all mains and services.
   - I. Disinfecting and flushing.
   - J. Health samples.
   - K. Repaving trench cuts.
   - L. Raising valve boxes to finish grade and paint to District standards.

M. Fire hydrants painted and pads poured.

N. Installation of service lines, appurtenances meter boxes, and customer service valves.

O. Connection to the existing system.

2. Sewer Inspections:

A. Trench excavation and bedding.

B. Placing of pipe, fittings, and structures.

C. Placing and compacting of the pipe zone backfill.

D. Backfilling of the balance of the trench to grade. Compaction tests to be taken by the city and/or county road departments in public right-of-way and by private soils consultant retained by the applicant and acceptable to the District in private streets and easements. Copies of test results shall be given to the District by the applicant for approval before final acceptance of the work.

E. Testing after backfill compaction of all utilities is approved by the city and/or county road departments and must be obtained before paving.

300.19.7 District Authority

Access: The District shall at all times have access to the work during construction and shall be furnished with every reasonable facility for ascertaining full knowledge respecting the progress, quality of labor, and character of materials used and employed in the work. No pipe, fittings, or other materials shall be installed or backfilled until inspected and approved by the District Engineer. The contractor shall give at least 72-hours notice prior to backfilling to the District inspector so that proper inspection may be provided.

Obligation: Inspection of the work shall not relieve the contractor of any obligations to complete the work as prescribed by the Standard Specifications. Any known defective work shall be corrected before testing or final inspection will be permitted. Unsuitable materials may be rejected at any time.

Suspension of Work: The District Engineer shall have the authority to suspend the work wholly or in part for such time as it may deem necessary if the contractor fails to carry out orders given by the District's inspector, or to perform any required provisions of the plans and specifications. The contractor shall immediately comply with a written order of the District to suspend the work wholly or in part. The work shall be resumed when methods or defective work are corrected as ordered and approved in writing by the District Engineer.

300.19.8 Existing Facilities

Connection and Shut Downs: Schedule connection to existing water and sewer facilities with the District Operations Staff. Contractors are not permitted to operate District valves. Coordinate shut-downs a minimum of 2-days in advance of the work.

Repairs: Any and all damage to existing facilities occurring as a result of new construction must be repaired to the District's satisfaction at the Developer's expense. Repairs may be performed by the

Developer's contractor or by District staff, at the discretion of the District Engineer.

Removals: Per the District's In-Tract Policy, new developments require the removal of existing facilities at or beyond their useful service life, and the installation of new infrastructure to serve the development. Excavate and remove all existing pipes, valves, manholes and appurtenances as indicated on the approved construction plans.

***Abandonment*:** Where it is impractical to remove an existing facility (for example, a pipeline crossing a street not otherwise being reconstructed), existing facilities may be abandoned in place with the approval of the District Engineer. Follow the procedures of Standard Specification Section 02222.

300.19.9 Pressure Test

A pressure test of the newly constructed domestic and recycled water lines shall be conducted as detailed in Section 15042 "Hydrostatic Testing of Pressure Pipelines" of the District's Standard Specifications.

300.19.10 Water for Flushing, Testing and Disinfection

Domestic water for flushing, testing and sterilization of the completed pipelines or sections thereof will be available from the District at the point, or points, of connection with the existing domestic water mains via the construction water connection.

The developer shall make all arrangements for this water with the District Engineer, which shall designate the exact location of the outlet or outlets, and the time periods these connections may be used. Special limitations may be imposed by the District Engineer for filing of larger infrastructures, such as large tanks or long distribution mains. The contractor shall be required to work with in these limitations and pay for all activities required to comply. Estimate quantity of water flushed in gallons to the District for tracking of unmetered water use.

If, due to construction problems or for any other reason, the developer desires to use water from some other source for testing, flushing, or chlorination, it shall be the responsibility of the developer to obtain the source of water, which water shall be tested and approved by the County Health Department prior to the use thereof. All expenses for obtaining and using another source of water shall be paid by the developer.
Cannon flushing operations shall be conducted with a residual line pressure not less than 30 psi and a District representative will be present. Adequate connections to conduct the flushing, testing and disinfection operations shall be furnished by the contractor and reviewed by the engineer, at no added cost to the District, and the developer shall pay for any and all costs for flushing, testing and disinfection.

300.19.11 Chlorination and Bacteriological Testing

After a passing pressure test, the domestic water lines shall be chlorinated and tested for bacteria as detailed in Section 15041 "Cloridation of Domestic Mains and Services for Disinfection" of the District's Standard Specifications.

300.19.12 Final Domestic Water and Recycled Water Facilities Inspection

Before final acceptance, the District Engineer will make a final inspection of all work, accompanied by the contractor's superintendent or representative, to verify that:

1. All phases of the job are complete in accordance with plans and specifications
2. All valve boxes are raised to finish grade and that all repairs are completed

3. All valves are referenced and the inspector has been given all reference measurements. Valves shall be located by a 2-inch "V" chiseled in the adjacent curb face
4. All right-angle meter stops, and the meters, are properly positioned and all meter boxes are positioned and raised to proper grade
5. Fire hydrants are raised to proper grade, are in a vertical position, painted; and its concrete pad is poured
6. Backfill has passed all compaction testing
7. All system valves are turned and left open (except those specifically required to be normally closed), direction and turns required for complete open/close cycle are recorded on the record drawings
8. Domestic water lines have been chlorinated and disinfected
9. Water line pressure testing and flushing have been completed
10. The job site is clean and cleared of all the contractor's equipment and materials
11. All service lateral locations have been marked on curbs
12. Certified test results have been provided for all backflow prevention devices
13. "RECORD DRAWINGS" with the "As-Built" revisions have been delivered to the District (See section 400.13)
14. Digital submittal of plan information in a format acceptable to the District

300.19.13 Final Sewer Inspection

Before final acceptance, the District, even though the sewers have been balled once, will require the contractor to flush and ball all sewer mains again. The District, accompanied by the contractor's foreman or superintendent, will make a final inspection of all work to check the following items:

1. That all bulkheads and plugs have been removed
2. The concrete base and channels in manholes are smooth
3. That manhole interiors are clean of all debris and excess concrete mortar
4. That all manhole concrete grade rings are adequately grouted and properly set
5. That pavement around manhole cover has been properly blacktopped to correct grade
6. That proper field tests have been made on all sewer main sections and manholes, particularly where sections of manholes had to be repaired
7. That backfill has passed all compaction requirements
8. That lateral locations have been mark with a "S" on curb

300.19.14 Raising of Valve Boxes and Manhole Rims

For paved areas in the applicant's development, and/or out-of-tract resulting from the developer’s project, the developer/contractor will raise all valve boxes and manhole rims for District constructed facilities for each lift of pavement.

300.20 RECORD "AS-BUILT" DRAWINGS

300.20.1 Record Drawings

Record drawings shall be based on an "as built" review and shall show all changes in the work constituting departures from the original contract drawings.

Upon completion of each increment of work, all required information and dimensions shall be transferred to the record drawings. Facilities and items to be located and verified on the record drawings shall include the following:

1. Point of connection
2. Location and elevation of all valves, bends and tees
3. Location of all services
4. Type, mfg., and model of valves & fire hydrant. Turns required for complete open/close cycle shall be provided for all valves.
5. Location of buried conduit and sensor line assemblies
6. Items located and constructed as called out in the plans need not be noted as such.
7. Final settings of instrumentation and control equipment.

Prior to submission of the record mylars, *two sets of bond or blue lines will be submitted* for review by the District. One set will be returned with comments if necessary. Final 4-mil Mylar record drawings are to be submitted only upon incorporation of the District's comments.

300.20.2 "As-Built" Survey

An "as-built" survey of the completed water line and appurtenances shall be made by the developer's engineer prior to placement of final paving. Markers or monuments shall be set during the placement of backfill so that all connection points, horizontal and vertical angle points, utility crossings, service connections and any other features and/or appurtenances designated by the engineer may be located. The contractor shall submit to the engineer for review, prior to the start of construction of the project, a program for installing the markers or monuments and shall comply with any recommendations of the engineer to modify such a program. It shall be the responsibility of the contractor to re-establish any lost markers or monuments.

300.20.3 Record Drawings Requirements

General Requirements: Keep accurate and legible records on a single set of full size project blue line prints of the drawings.

1. Make the record drawings available for review by District's representative in contractor's field office.

2. Maintain record drawings on an up-to-date basis with all entries reviewed by District's representative.

3. Protect the record set from damage or loss.

Detailed Requirements:

1. Mark on the drawings all changes in the work which occur during construction, including adding approved changes.

2. Show locations by key dimensions, depths, elevations of all underground lines, conduit runs, sensor lines, valves, capped ends, branch fittings, pull boxes, etc.

3. Record information on maintenance access and/or concealed work..

4. Make a record of finalized hydraulic and electrical equipment control settings in the tables and spaces provided on the drawings.

5. Following District review of record drawings, a complete and final set of photo 4–mil mylar as-built plans and AutoCAD Digitized files for the water, sewer and recycled water systems, satisfactory to District Engineer, together with a copy of the specifications used for Owner's work on the water and sewer system and any recycled water system in connection with the Project.

6. A complete, detailed statement of account, satisfactory to District Auditor, of the Amounts expended for Owner's work on the water and sewer system, with values applicable to the various components thereof, together with a list of any other materials and equipment (and their values) being transferred.

300.20.4 Electronic File Requirements

Text Files:

1. Specifications may be submitted in Microsoft Word (.doc) or Adobe Acrobat (.pdf) format.

2. Tables may be submitted in Microsoft Excel (.xls) or Adobe Acrobat (.pdf) format.

Drawing Files:

1. Record Drawings shall be submitted as scanned images and as Computer Aided Design (CAD) files.

2. Scanned images may be submitted in standard image format (tif, or .jpg), or in Adobe Acrobat (.pdf) format.

3. CAD files shall be submitted in AutoCAD, version 2000 or later.

300.21 EASEMENT VERIFICATION

The developer's engineer will verify in writing that the facilities to be accepted by the District Engineer were constructed within the easements as listed in the easement documents. In the event the facilities were not constructed within the designated easement, the engineer will submit revised easement documents, quitclaim documents, and a final title report for recordation.

300.22 METER USE AND FEE VERIFICATION

With the record drawings, the applicant is to furnish the District Engineer a cost breakdown of the newly installed facilities for District accounting purposes (refer to Appendices 9A, 9B and 9C). This is to be furnished to the District Engineer before an acceptance letter- releasing bond will be written (refer to Appendices 10A, 10B and 10C). The District Engineer will verify the quantities used in the calculation of the fees for the "Infrastructure Agreement." Any adjustments to the fees will be made at this time.

300.23 BOARD ACCEPTANCE

After satisfactory completion of the items in Section 300.1 through 300.22, the District Engineer will, upon the request of the developer, petition the District's Board of Directors for acceptance of the project, and the commencement of the one year warranty period.

The District will also re-evaluate the plans for compliance with the "Infrastucture Agreement" and reserves the right to re-assess the development impact fees if deviations from the originally approved plans have been made. Changes include, but are not limited to: the number of service connections, meter sizes, building square footage, the irrigated area, the number of dwelling units, and any other measure used to calculate the original impact fees.

300.24 RELEASE GIVEN TO CITY AND/OR COUNTY

300.24.1 Bond Release

All final inspection requirements shall be fulfilled before the District will give its final acceptance notice to the City and/or County for release of the applicant's bond to those agencies. The applicant's bond with the District shall remain in effect in accordance with Section 100.5 and the Agreement.

300.24.2 Domestic Water, Sewer and Recycled Water Service in service prior to Acceptance

District Engineer may approve putting newly installed domestic water, sewer and recycled water system into service prior to District Board acceptance after compaction has been approved by the governing agency and the portions have been pressure tested, chlorinated, flushed, and have passed the bacteriological test and inspection for domestic water mains. This partial acceptance shall be granted only upon written request from the applicant and subsequent approval by the District Engineer. Upon this written approval for partial acceptance of facilities, the applicant shall be relieved of the duty to maintain the portions so used or place into operation provided, however, that nothing in this section shall be construed as relieving the applicant of full responsibility for completing the work in its entirety, for making good any defective work and materials, for protecting the work from damage, and for being responsible for damage and for work as set forth in the agreement and other contractual documents; nor shall such action by the District be deemed completion and acceptance, and such action shall not relieve the applicant of the guarantee provision of the Agreement with the District. One-year guarantee period shall not start until acceptance by the District Board of Directors has assessed. (See section 300.24)

300.25 SECURITY RELEASE

If in the time period of one-year from the date of District Board Directors acceptance, no failure of the system has occurred, which has gone unrepaired by the developer, to the satisfaction of the District Engineer: the developer may petition the District Engineer to request final acceptance of the project by the

District Board and release of the surety.

END OF SECTION

SECTION 400

DESIGN CRITERIA
DOMESTIC WATER FACILITIES

400.1 DESIGN FLOW AND PIPE VELOCITY CRITERIA

The criteria for velocity shall be as described herein. The maximum velocity in a line shall not exceed 5 fps (feet per second) during the peak hour condition. The peak hour is defined as 4 times the average day demand. The maximum velocity in a line shall not exceed 7 fps during the maximum day plus fire demand condition. The maximum day is defined as 2 times the average day demand. Residential design flows shall be based on 130 gallons per capita per day. Commercial/Industrial design flows shall be calculated based on the developer's estimated water demands for the proposed development.

400.2 ALLOWABLE SIZE FOR WATER MAINS

The normal minimum diameter for a water line shall be 8-inches for distribution mains, short street configurations, and dead-end streets. The next allowable water line diameter is 12-inches for distribution mains. The applicant must determine the pipe diameter requirements above 12-inches, which shall be approved by the District Engineer.

400.3 TYPE OF MAIN PIPE

Only AWWA C-900 PVC pipe, pressure class 350 is to be used for distribution mains of 6 inches in diameter or less, or as directed by the District. Either C900 PVC or C151 Ductile Iron Pipe (DIP), pressure class 350, may be used for 8-inch to 12-inch diameter mains. Water mains greater than 12-inches in diameter are considered engineered systems and require specific approval by the District Engineer (DIP is preferred but not mandated).

Flanged pipe, when required, shall be DIP, thickness Class 53 unless a higher-pressure class is required for special installations. DIP shall be provided and installed per Section 15056 of the District's Standard Specifications. Fully restrained DIP shall be used within easements with restricted access and slopes exceeding 10%.

400.4 MINIMUM DEPTH TO TOP OF WATER MAIN PIPE

400.4.1 Residential Areas (Usually 12-Inch and Smaller)

The top of the pipe is to be a minimum of 36 inches below finish grade, unless indicated otherwise on project plans or directed otherwise by the District inspector because of unusual field conditions. The top of pipe is to be a minimum of 36 inches below finish grade in unpaved areas.

400.4.2 Transmission Mains. (Usually Larger than 12-Inch)

The top of the pipe is to be a minimum of 42 inches below finish grade, unless indicated otherwise on job plans or directed otherwise by the District inspector because of unusual field conditions. The top of pipe is to be a minimum of 60 inches below finish grade in unpaved areas.

400.5 STANDARD LOCATION

Domestic water main centerlines shall normally be located 6 feet from the outside travel lane line and may be deflected to avoid cross gutters, concrete bus lanes or other interferences. Water lines will not be allowed within easements in residential lots. There must be dedicated utility easement, minimum width 20 feet, if a water line needs to go outside streets from cul-de-sac to cul-de-sac.

400.5.1 Water Main Deflection

Water mains may be deflected at the joints to reduce the number of angled fittings required. Comply with Sections 15056, Ductile Iron Pipe and Fittings, or Section 15064, PVC Pressure Distribution Pipe, as applicable.

400.6 WATER VALVE SPACING

As a general rule, there should be three (3) isolation valves where one main ties into another (i.e. at tees). Where two mains intersect (i.e. at a cross) there should be four valves. On long blocks, intermediate valves should be installed so that a maximum of 500 feet would have to be shut off at any one time.

Valves should also be spaced so that not more than two fire hydrants should be out of service at any one time.

In most cases where water mains pass through easements outside traveled streets, a valve shall be located at each end of the easement. The final determination of valves and locations shall be per the District Engineer.

400.7 SEPARATION OF DOMESTIC WATER, SEWER, AND RECYCLED WATER LINES

400.7.1 Horizontal Separation

State Health Department regulations require new water mains and supply lines shall be installed at least ten foot horizontal separation from and one foot minimum vertical separation above any parallel pipelines conveying untreated sewer, disinfected secondary-23 recycled water or sludge. New water mains and new supply lines shall be installed at least four feet horizontally from, and one foot vertically above any parallel pipeline conveying disinfected tertiary recycled water or storm drainage. However, in special situations where there is no alternative but to install the mains with less than the required separation, special construction will be considered by a permit action with the Department of Health Services and on an individual basis by the District Engineer (See Standard Plan W-16). Domestic water lines are normally located on the opposite side of the street from the recycled water line.

400.7.2 Vertical Separation

Normally, water, sewer, and recycled water shall be located vertically from the street surface in order of the higher quality, i.e., domestic water shall be above recycled water and recycled water shall be above sewer. Whenever a crossing must occur where a sewer main passes within 1 foot of a domestic water main or where a sewer main passes within 1 foot of a recycled water main, special construction will be required as shown on MCWD Standard Plan W-16.

If the conditions of Standard Plan W-16 cannot be met, then one of the following types of alternates may be required:

1. Reinforced concrete encasement, a minimum thickness of 6 inches.

2. Piping within a continuous steel casing, per Standard Plan W-16, which shall have a

thickness of not less than 1/4 inch.

If a sewer is above a water main, the special construction shall extend a sufficient distance on both sides of the crossing to provide a minimum of 10 feet of horizontal clearance. If a sewer is located below a water main, and within a vertical distance of a 1-foot clearance distance, the special construction shall extend a sufficient distance on both sides of the crossing to provide 4 feet of horizontal clearance. These construction requirements shall not apply to house laterals that cross perpendicular less than 1 foot below a pressure water main.

400.7.3 Storm Drains

Storm drain systems must be designed with sufficient cover so that the water mains and service laterals can be built over the top of the storm drain mainline and laterals with a minimum 12-inch clearance, in compliance with California Department of Health Services (DHS) requirements and standards.

400.8 FIRE FLOW DEMAND

The design criteria to be used for determining fire flow requirements shall be as determined by the local fire authority. Before designing the domestic water system for a project, the applicant shall obtain the local fire authority's fire flow requirements for the project. These requirements, plus written indication of the Fire Marshal's approval, are required to be on the improvement plans prior to District's approval. All fire flow tests shall be performed by the District. District shall charge a fee to perform this fire flow test. As a general guide, the following shall be considered:

400.8.1 Residential Dwelling Units

The water system shall be capable of providing a residential fire flow minimum of 2,000 gpm, combined flow, for a 4-hour duration from any two adjacent hydrants at a minimum 30 pounds of residual pressure (psi) at the main. For residences 3,600 square feet and under, the minimum requirement shall be 1,500 gpm per hydrant at 20 psi regardless of the relative location to open space areas. For residences over 3,600 square feet, the Fire Marshal shall be consulted. The open space area is defined as any area bordering an undeveloped open space with no fire control mechanism.

400.8.2 Schools and Commercial Areas

The system shall be capable of providing a fire flow of at least 3,000 gpm for 3 hours duration (or as required by the Fire Marshal of the local fire authority) out of any two adjacent hydrants at a minimum 20 pounds of residual pressure at the main.

400.8.3 Industrial Areas

In industrial developments requiring a high fire flow, the applicant shall consult with the Fire Department to discuss options for upgrading the domestic water system to deliver the fire flow or provide built-in sprinkler protection for the structures.

400.9 FIRE HYDRANTS

The location of fire hydrants shall be as determined by the local fire authority, and per the guidelines set herein. The exact location with respect to the curb and sidewalk shall be as shown in District Standard Plan W-8.

400.9.1 Fire Hydrant Spacing

The maximum fire hydrant separation shall be 300 feet from fire hydrant to fire hydrant. The only exceptions will be at the discretion of the Fire Marshal. Bollards to protect the hydrant my required at the discretion of the District

Fire hydrants shall be located near the beginning of curb return (BCR) or lot lines. No fire hydrant shall be located within 3 feet of a driveway, or closer than 40 feet to any structure unless approved by the Fire Marshal. Bollards to protect the hydrant may be required at the discretion of the District Engineer. Refer to section 400.6 regarding main valves and their affect to fire hydrant service.

400.9.2 Hydrant Laterals

In situations where the fire hydrant run is over 20 feet, the size of the hydrant lateral shall be 8-inches. Shorter laterals may be 6-inch in diameter.

400.9.3 Types of Hydrants

Fire Hydrants shall be provided in accordance with District Specifications Section 15139 “Fire Hydrants”

400.9.4 Plan Requirements

Fire hydrants shall be shown on the plans where the hydrant is to be located with respect to the property line, and what easements will be provided. The building foot prints or building pad areas are also to be shown. Developer shall follow the hydrant numbering system established by the Fire Marshall.

400.10 SERVICE MATERIALS AND MINIMUM SERVICE SIZE

400.10.1 General

Approved materials and manufacturers for various service material tubing and connections are as listed in District's Standard Specifications, herein.

Service laterals shall tap into a water main (Standard Plan W-1 or W-2) or a manifold lateral (Standard Plan W-3). Laterals may not tap into other service or hydrant laterals.

400.10.2 Minimum Domestic Service Size

Minimum domestic service line size shall be 1-inch with a 5/8 x 3/4-inch meter. The sizing of the service shall be specified on the plans designated by lot numbers. Services for commercial or industrial developments are to be as shown on plans or as directed by the District Engineer.

For industrial, commercial, private-street residential, and other nonresidential development, the District may require a detail on the plans of the location of the proposed service.

400.10.3 Type of Service Line

Acceptable service line material is as described below:

1. 1-inch and 2-inch service line shall be copper tubing per Section 15057 or copper tubing size (CTS) polyethylene per Section 15058.

2. 4 inches and larger, use DIP per Section 15056, or PVC per Section 15064 of the District's Standard Specifications, as determined by the District Engineer. (3-inch is not permitted).

400.10.4 Meters

Per District ordinance, all newly constructed dwelling units shall be individually metered. All water meters will be furnished by the District, subsequent to payment of all applicable charges and posting of all required bonds and insurance. The District will install all meters up to 2 inches. All water meters 3-inch and larger will be installed by the applicant.

The developer shall identify the meter size required for its project. The District Engineer shall review and accept, or propose a revised meter size based on information provided by the developer. All calculations, worksheets, figures, correspondence with the local Fire Authority, must be submitted to the District Engineer or his/her designee. A worksheet to assist with the determination of a meter size is available at the District offices. Below are the District's flow and water fixture-unit criteria for various meter sizes.

Meter Size		GPM - MAXIMUM	Water Fixture-Units MAXIMUM
3/4"		23	35
1"	-	37	75
1½"	-	75	130
2" Disc	-	120	
2" Turbine	-	160	
2" Compound	-	160	
3" Turbine	-	350	
3" Compound	-	320	
4" Turbine	-	1000	
4" Compound	-	500	
6" Turbine	-	2000	
6" Compound	-	1000	
8" Turbine	-	3500	
10" Turbine	-	5500	

District reserves the right to size meters at any time.

For residents with fire protection sprinklers supplied through a domestic water meter, the developer shall consult with both the architect and fire sprinkler designer before proposing a meter size. If the fire protection sprinklers cause the meter to be upsized, the water fixture-unit count without fire protection sprinklers may be used to determine the monthly fixed cost billing rate for the meter. For example, a home with 31 fixture units plus fire protection sprinklers requiring a 1" meter would be charged to install a 1" meter; however, the monthly fixed cost would include the cost for a ¾" meter plus the cost of a 1" Private Fire Meter Charge.

Types of meter:

1. A turbine meter and strainer shall be used on all irrigation services 2-inch and larger and as determined by the District.
2. A compound meter and strainer may be used on all master metered domestic multi-unit developments and as approved by the District.

A by-pass line shall be installed on all meter assemblies, 3 inches and larger, as shown on Standard Plans W-24 and W-25. A by-pass line is not required for the following conditions, as determined by the District Engineer:

1. Multiple metered connections for a single building
2. Irrigation services

A lockable corporation stop or valve shall be installed on all by-pass lines. A by-pass line may be required on smaller installations, which require continuous service.

400.10.5 Pressure Reducing Valves

When system pressure is above 80 psi then all residential lots shall be provided with approved pressure regulators set at 80 psi and shall be installed per the appropriate governing agency's standards.

400.11 CROSS CONNECTION CONTROL

All domestic water services shall be subject to the provisions of section 3.28 of the District's Code. The following summarizes these provisions:

Cross connections of any type that permit a back flow condition from any source or system other than that of the District's domestic water mains are prohibited. A connection constituting a potential or actual back flow hazard is not permissible unless a back flow device or air gap, which is approved by the California State Department of Health and complies with Title 17 of the California State Administrative Code, is installed. Such an installation shall at all times be subject to inspection and regulation by the District for the purpose of avoiding possibility of back flow.

The District will not provide any water service to any premises unless the public domestic water supply is protected as required by State and District regulations. Except in special situations, it is now required to have back-flow devices installed for:

- All commercial domestic water services
- All industrial domestic water services
- All fire lines where the commercial or industrial buildings are over two stories in height
- All domestic systems or fire line systems having two, or more, points of connection to District mains
- All irrigation services on the domestic water system
- All domestic services to sites with recycled water irrigation service

The customer shall have the device regularly tested (at least once a year) by a tester certified by the AWWA California-Nevada and the California Department of Health Services and service such devices to maintain them in satisfactory operating condition and shall overhaul or replace such devices if they are found defective. Test results shall be provided before District will accept service as complete.

Records of such annual tests, repairs, and overhauling shall be kept by the customer and copies forwarded to the District’s Cross Connection Program Specialist.

Service of water to any premises may be discontinued by the District if a back-flow prevention device required by the District ordinance is not installed, tested, and maintained; or if any defect is found in an installed back-flow prevention device; or if it is found that a back-flow prevention device has been removed or bypassed; or if unprotected cross-connections exist on the premises. Services will be restored only when such conditions or defects are corrected to the satisfaction of the District.

The District will further define how water lines must be marked where multiple water systems are in use and outline the duties and responsibilities of a property's water supervisor.

Additional reference for guidelines regarding selections and installation of back-flow and cross-connection control devices are approved may be found in:

1. Marina Coast Water District Water Code, Chapter 3.28, Cross Control and Appendix A, and section 15112 "Backflow Prevention" of the District's Standard Specifications.

2. Regulations Relating to Cross-Connections, California Administrative Code - Title 17 - Public Health.

3. Manual of Procedures and Practices for Public Water Suppliers (California Department of Health Services - Public Water Supply Branch

3. Manual of Cross-Connection Control, published by Foundation for Cross-Connection Control and Hydraulic Research, University of Southern California, University Park, Los Angeles, California 90007.

400.12 STANDARD WATER NOTES

The following standard water notes shall be included on all water system construction plans.

Applicant is also referred to Section 300.4.2.

1. The water system as shown on these plans shall be constructed in accordance with the standard plans and specifications of the Marina Coast Water District. Contractor shall keep a copy of the standard specifications and drawings on the jobsite at all times.

2. The Marina Coast Water District shall be notified at least 48 hours prior to commencing work on the water system. Phone (831) 384-6131 for inspection. A preconstruction meeting shall be held at least 24 hours before starting construction.

3. The water system is to be installed by the applicant. All water system work shall conform to the District's "Standard Plans and Specifications," as last revised. The contractor shall have a copy of these plans and standard specifications on the job at all times.

4. The District shall be furnished with three (3) copies of approved construction plans prior to starting construction. A preconstruction conference of representatives from affected agencies and the contractor shall be held on the job site 24 hours prior to start of work.

5. Domestic water mains shall be installed after the installation of curb and gutter at six feet off of curb ace, or as staked by the applicant's surveyor at a minimum 50-foot stationing, if there are no existing curbs.

6. All nuts and bolts, shall be grade 316 stainless steel. All buried flanges, valves and fittings shall be

wrapped with 10-mil polyethylene sheet.

7. Any water service found to be within a driveway or sidewalk shall be removed at corporation valve and reinstalled at the proper location, at no cost to the District.

8. All main line valves shall be maintained so as to be accessible during tract development, and all valve stem tops having over 48 inches of cover may require an extension as per MCWD Standard Plan W-7.

9. The top of the pipe shall be a minimum of 42 inches of cover from the finished grade in paved sections, unless indicated otherwise on the job plans or directed otherwise by the District because of unusual conditions. Pipe shall be bedded and backfilled per MCWD Standard Plan W-12.

10. Fire hydrants shall be installed in accordance with the appropriate details herein and installed behind curbs and sidewalks where the sidewalks are adjacent to the curbs. Fire hydrants shall be per the District's specifications and shall have a concrete pad poured around them. All fire hydrants shall be set with the bottom flange 4 inches above the concrete pad or sidewalk.

11. No facility is to be backfilled until inspected by the District.

12. Shut down or tapping of existing domestic waterlines to facilitate connection to existing facilities shall be coordinated with the District at least 24 hours in advance. Any relocation of existing facilities is subject to approval of the District Engineer.

13. No taps or other connections shall be made to existing District water mains prior to conducting an approved pressure and bacteriological test on the new water distribution system. Tapping sleeves shall be pressure tested in an approved manner in the field in the presence of the District inspector, prior to tapping the main line. Tapping of the main line shall not proceed unless a District inspector is present.

14. All water services shall be installed per the District's standard specifications. All meters shall be installed in grass or planter areas and accessible by vehicle. Any services located in sidewalks are subject to the appropriate governing agency and District approval. Any meters located in banks of 4 shall be manifolded per MCWD Standard Plan W-3. All meter registers and lids shall be marked with address identification.

15. Where meters and meter boxes are located within slopes, the angle meter stops shall be so located that the meters and boxes will be parallel and flush, respectively, with the finished street surface. A retaining wall may be required around the meter box.

16. The applicant shall furnish and install the service connections between water mains and meters and meter boxes. Water services shall be installed to the property line prior to paving of the street.

17. Curb face shall be inscribed with “W” indicating locations of all domestic water services.

18. Water low-flow devices shall be provided for all units within this development in accordance with rules and regulations of the District.

19. All valves shall be located off the tee unless otherwise approved by the District. At intersections and bus stops with concrete pads, the main line shall be roped to avoid cross gutter conflict.

20. Individual pressure regulators will be required by the plumbing codes of the city having jurisdiction if

static pressure reaches 80 psi or more.

21. All water meters will be furnished by the Marina Coast Water District following receipt of application and deposit. The District will install water meters up to 2 inches. The Contractor shall install water meters 3 inches and greater. The contractor shall place all piping per District plans and properly locate the meter boxes to grade prior to installation of the meters by the District.

22. Any District water used for construction shall be metered with a construction meter obtained from the District.

23. An Encroachment Permit from the County or city having jurisdiction is required prior to any work within public right-of-way or easement.

24. The existence and location of any underground utilities or structures shown on these plans were obtained by a search of the available records. Approval of these plans by the District does not guarantee the accuracy, completeness, location, or the existence or non-existence of any utility pipe or structure within the limits of this project. The contractor is required to take all due precautionary means necessary to protect those utility lines not shown on these plans.

25. The applicant shall remove to the satisfaction of the MCWD inspector all unused water stubs and/or services that was provided to the project site.

400.13 MISCELLANEOUS STANDARD GUIDELINES

1. Quantity estimates, for the domestic water systems, are to be included on the plans indicating quantity of pipe, valves, fire hydrants, domestic water services, etc.

2. The drawing shall show on plan and profile the position of all other known underground utilities or proposed underground utilities. (Top and bottom of pipe elevations may be required in addition.).

3. Manual air-release assembly shall be installed at service stub-outs for testing and flushing purposes.

4. Air and vacuum valves are to be installed at all high points in the line for 12-inch size pipe and larger, or as directed by the District.

5. The vacuum release shall be sized to accommodate 100% of the pipeline flow (as CFM of air).

6. Air release shall be sized to accommodate the release of the maximum amount of entrained air that could be released in the system, as a function of the maximum differential in temperature and pressure which could result in air entrainment, or 2% of the volume of water passing through the system; whichever is greater.

7. Generally the District requires all fittings and valves to have "push-on" type ends, except at tees and crosses where valves are required. Valve and fitting are to be joined by a flange.

8. The contractor shall restore or replace all removed or damaged or otherwise disturbed existing surfaces or structures not otherwise noted on the plans or specified herein to a condition equal to that before the work began and to the satisfaction of District's Engineer, and the underlying jurisdictional authority. All excess earth and all other debris shall be removed and disposed of by the Contractor and the entire site of the work shall be left in a condition acceptable to the District Engineer prior to final acceptance of the work. All restoration and cleanup shall be performed in accordance with the

District's Standard Specifications.

9. Blow-offs are required at the ends and low point of all mains.

10. Dead-end water mains are limited to 600-feet or 28 service connections, whichever is most restrictive.

400.14 Water Conserving Fixtures

In all new construction and/or renovations that include plumbing work, the following water efficient equipment is mandated by District ordinance. Additional equipment specifications are in Standard Specification 21000.

1. Only High Efficiency Toilets (HET) or Dual Flush Toilets may be installed. HET toilets are defined as 1.28 gallons per flush or less.

2. Each showerhead shall be 2.5 gallons per minute (gpm) and have it's own control valve or set of hot and cold control valves (i.e., showers with multiple heads require separate valves for each head).

3. A hot water recirculation system or point of use hot water heater shall be installed if hot water fixtures are more than 10 linear feet away from the hot water heater.

4. All urinals shall be zero water use (i.e., flushless or waterless).

5. Clothes washers in new residential units shall be high efficiency (HE). HE clothes washers use a maximum 8.5 gallons per cubic foot of wash load.

END OF SECTION

SECTION 500

DESIGN CRITERIA
SEWER FACILITIES

500.1 DESIGN CRITERIA FOR GRAVITY SEWERS

500.1.1 Flow Rate Generation

The design peak flow rate for residential sewer mains shall be calculated using a base generation rate of 90 gallons per capita day (gpcd), the density and peaking factors contained in Figure 500-1, and an Infiltration and Inflow (I/I) factor. The following formulas are used to define the calculations:

Design Peak Flow Rate = Peak Wet Weather Flow Rate (PWWF)

PWWF = Peak Dry Weather Flow + [Average Dry Weather Flow x I/I factor]
= PDWF + (ADWF x I/I)

PDWF = ADWF x Peaking Factor from the graph in Figure 500-1.

ADWF is calculated using a base generation rate of 90 gallons per capita day (gpcd) multiplied by the proposed population of the development. Population may be estimated using the table in Figure 500-1. ADWF generation rate projections for specific commercial/industrial developments proposed are required and should be calculated by the developer's engineer.

I/I factors are the following:

I/I factor = .44, when designing new sanitary sewers.

I/I factor = .67, when designing sanitary sewers that utilize existing sewers installed prior to 1997.

500.1.2 Peak Flow Limitation (Based on d/D Ratio)

The design peak flow rate allowed within a pipeline of any given diameter will be limited by the resulting depth-to-diameter ratio (d/D ratio) where 'd' is the calculated flow depth in the pipe and 'D' is the inside diameter of the pipe. For pipes 12-inches in diameter and smaller, the maximum allowed d/D ratio is 0.67. For pipes 15-inches to 24-inches in diameter, the maximum allowed d/D ratio is 0.80. For pipes 27-inches in diameter and larger, the maximum allowed d/D ratio is 0.90.

500.1.3 Minimum and Maximum Velocity

All sewers shall be designed and constructed to yield mean velocities within the pipeline, at peak dry weather flow (PDWF), of at least 2.0-fps while not allowing velocities to exceed 8.0-fps. Flow velocities will determined by the utilization of Manning's formula for open-channel flow and will use an "n" value of 0.013. Variance from the requirements in this section will be allowed only with approval by the District Engineer.

500.1.4 Minimum Pipe Diameter

Sanitary sewer mains shall generally be 8-inch diameter or larger. 6-inch sewer mains are only allowed for top-of-line segments (dead-end lines, alleys and cul-de-sacs). When two or more sewers flow into a manhole, the sewer out shall be a minimum of 8-inches.

500.1.5 Minimum Slopes

The following are minimum slopes; however, slopes greater than these are desirable:

Sewer Size (inches)	Minimum Slope in Feet per 100 Feet
6	0.60
8	0.40
10	0.32
12	0.28
15	0.15
18	0.12
21	0.10

These are absolute minimum slopes. Sewers should be designed to provide steeper slopes whenever possible so that the 2.0-fps minimum flow velocity is exceeded and pipeline invert scouring is improved. The maximum allowable slope shall be the slope that generates a maximum flow velocity of 8.0-fps at the peak dry weather flow rate.

Under special conditions, the developer's engineer may request slopes of less than the minimums stated. The developer's engineer must submit this request along with back-up data and calculations to show that the depth of flow at design average dry weather flow will be 0.3 of the pipe diameter or greater. The developer's engineer must also submit computations to show the depths of flow within the pipeline at minimum and average flow rates. The request shall detail the reasons why the normal minimum slopes cannot be achieved. The request and supporting data will be reviewed by the District Engineer and his decision will be conveyed to the applicant.

500.2 STANDARD LOCATION, ALIGNMENT, AND STATIONING

500.2.1 Location

Wherever possible, in local residential and industrial streets, pipe is to be located 5-feet from the street centerline. In major, primary, and secondary highways, pipe will be located in the center of the driving lane nearest to the center of the street. Pipe should not be located in median strips or parking lanes. On curvilinear streets, pipe shall parallel as nearly as possible the street centerline by means of horizontal curves.

500.2.2 Alignment

Barring other limiting design and construction considerations, a maximum separation between sewer and domestic water mains in new subdivisions shall be achieved by the following construction procedures:

1. On curvilinear streets, the sewers shall parallel as nearly as possible the street centerline by means of horizontal curves.

2. Sewer mains should be installed on the opposite side of the centerline from the domestic water mains.

500.2.3 Radius of Curvature

Minimum radius of curvature shall comply with Section 02701, Installation of Gravity Sewer Pipelines, or the pipe manufacturer's recommendation, whichever is more restrictive.

500.2.4 Stationing

Sewer centerline stationing shall be shown (example: 00+00.00) with the stationing starting at the most downstream manhole or connection to existing sewer and the stationing increasing upstream to the last manhole on a sewer line. Intersecting sewer lines shall be independently stationed from their downstream point of connection and increase upstream to the last manhole or clean-out. Each line shall be independently labeled for identification as "Sewer Line A", "Sewer Line B", etc. Sewer stationing may be independent of street stationing.

500.2.5 Minimum Cover

Minimum cover from finish street grade to top of sewer main pipe is to be 4 feet or 12-inches below any potable water main in the right-of-way, whichever is deeper, unless approved otherwise by the District Engineer. Sewers shall be deep enough to allow lateral connections meeting minimum depth at curb.

500.2.6 Separation Between Waterlines And Sewers

Adequate horizontal and vertical spacing shall be maintained in accordance with Section 400.7 and District Standard Plan W-16.

500.3 SEWER PIPE MATERIAL

All gravity sewers and laterals 15-inch diameter and smaller shall be SDR-35 PVC as described in the District's Standard Specification Section 02715. Gravity sewers 18-inch diameter and larger shall be DIP with polyethylene lining (per Standard Specification Section 15056) or PVC with a suitable size dimension ratio for the installation conditions. Exceptions must be pre-approved by the District Engineer. All sewer force mains shall be PVC pipe meeting District Standard Specification Section 15064, AWWA C-900, and Class 150 pipe standards.

500.4 FORCE MAIN CRITERIA

The size of sewer force mains shall be determined during the design phase of the project and only after a comparative study of the construction cost and pumping costs for several alternative sizes. In no case shall a force main be less than 6-inches in diameter. The capacity of the force main shall be the design peak flow from the pump station calculated from Manning's equation using "n" = 0.013. The nominal design velocity for a force main should be 3.0-fps, with minimum velocity of 2.0-fps, and maximum allowed 8.0-fps. The discharge shall be into a manhole with a smooth flow transition to a gravity sewer. The manhole shall be epoxy coated on the interior or PVC lined for corrosion protection.

500.5 MANHOLES

Refer to District Standard Specification Section 03461, Precast Reinforced Concrete Manholes and Manhole Bases for additional information.

500.5.1 Manhole Spacing and Location

Manholes shall be installed at the end of each line; at all changes in grade, size, or alignment; at all intersections; and at distances not greater than 300 feet for 6-inch sewers, 400 feet for 8- through 15-inch sewers and 500 feet for 18- to 30-inch sewers. If a sewer is curved, closer spacing of manholes will be required. Greater spacing may be permitted in larger sewers. Only one curve (horizontal or vertical) shall be allowed between any two manholes.

500.5.2 Manhole Type, Size, and Depth

Manhole depth is calculated from finish grade to lowest pipe invert. Minimum manhole depth is to be 5 feet unless approved otherwise by the District Engineer. Manholes shall typically be from 7 feet to 12 feet deep. Manholes over 20-ft deep must be approved by the District Engineer. Depth of manhole shall be measured from the pipe invert to the finished surface of the street with a tolerance of ± 1-inch.

Manholes shall be pre-cast reinforced concrete with an eccentric cone. The minimum internal diameter shall be 48-inches. Pipe penetrations shall not exceed 30% of the internal circumference. Large or numerous pipe penetrations may require the installation of larger diameter manholes. Manholes over 20-ft deep may require larger diameters, at the direction of the District Engineer.

For larger sized sewer mains or special circumstances, the manhole size will be as shown on plans.

500.5.3 Minimum Assumed Head Losses Thru Manholes

Minimum head loss in manholes shall be as follows:

1. Straight run through manholes based on 0.20 foot loss.

2. Right angle turn in manholes based on 0.5 velocity head loss (i.e. $(0.5)(V^2/2g)$), or 0.30 foot, whichever is greater.

500.5.4 T-Lock Lined Manholes

The District has been experiencing substantial deterioration in manholes at some locations due to hydrogen sulfide gases released from sewage flow. In order to mitigate the problem on future sewers, the District requires manholes that meet certain criteria be constructed with an integral PVC liner. The District-approved PVC liner material/process is Ameron T-Lock™ liner. The District has established the following criterion to govern the requirement for lining manholes with a PVC liner:

1. If the sewer has a slope of 7% or greater, then all manholes will be PVC-lined.

2. Where there is a change in slope, from steep to flat (relative to the direction of flow), of 5% or greater, the manhole at the grade change and the next manhole upstream will be PVC-lined.

3. All drop manholes, including force main terminal (i.e. the transition from forced flow to gravity flow) manholes, will be PVC-lined.

4. When required by the District Engineer.

500.5.5 Manhole Covers

Cast-iron covers and frames shall be provided in accordance with District Standard Specification Section

03461 and Standard Plan S-3.

At the completion of final paving, the manholes shall be raised to final grade by using the necessary sized grade rings.

500.5.6 Access to Manholes

All sewer manholes shall be designed and constructed with a direct access to them. Manhole steps shall not be installed. Unpaved access may be allowed as determined by the District Engineer

500.6 CLEAN-OUTS

Use of clean-outs (as shown in District Standard Plan S-6) on service laterals and sewer mainlines shall be required in the following instances unless otherwise approved by the District Engineer.

1. At the point of connection to the building drain.

2. At any single turn greater than forty-five degrees.

3. At intervals not to exceed one hundred (100) feet along the side sewer system.

4. Short sections of sewer main, less than 250-feet that will be extended.

5. All commercial and industrial sewer lateral installations at the property line.

6. Between manholes, if there is a reverse curve in the sewer main, to facilitate cleaning of the main line.

7. Special instances such as on a sewer lateral to a single family residential lot where the dwelling unit is set back more than 100-feet from the property line, where there is a large slope up to the building pad from the property line and a grade change in the lateral is necessary, or where the sewer lateral enters the rear of the lot from a public right-of-way.

8. On a lateral where the overflow level of the lowest wastewater fixture in the building is below the rim elevation of the uphill sewer manhole on the main line. In this situation the rim elevation of the clean-out installed at the property line shall be at least 6-inches below the overflow elevation of the lowest wastewater fixture on the lateral. A backflow prevention device is required on the lateral per Section 4.11 of the District‘s Code.

500.7 HOUSE LATERALS AND MINIMUM DEPTH AT CURB

All sewer laterals shall be located by the applicant and shown (with stationing) on the improvement plans.

House connections shall be constructed to the property line. There shall be one house sewer lateral constructed for each individually owned dwelling unit and it shall have a minimum diameter of 4 inches.

Four-inch sewer house connections shall be laid to the grade as established by the applicant so that the 4-inch house connection will have a minimum cover of 3 feet from the top of the curb to the top of the pipe per Standard Plan S-7. The sewer laterals from the main to the building, and inside the buildings are governed by the Uniform Plumbing Code and enforced by the local building authority.

500.8 TOWNHOUSES AND CONDOMINIUM LATERALS

For buildings containing two to four units, either one 4-inch diameter lateral to each unit or one 6-inch or larger diameter lateral to the building shall be used. For buildings containing more than four units, either one 4-inch diameter lateral to each unit or one 8-inch or larger diameter lateral to the building shall be used. A lateral shall serve only one building regardless of number of units per building.

500.9 BACKWATER PREVENTION

Backwater prevention devices are required on sewer laterals connecting to all buildings. Variances may be considered by the District Engineer on a case by case basis. Exceptions cannot be granted for laterals to buildings where the building ground floor elevation is below the rim elevation of the uphill sewer manhole on the main line.

500.10 INDUSTRIAL PRETREATMENT

Requirements for industrial pretreatment of sewage will be determined by the Monterey Regional Water Pollution Control Agency (MRWPCA). Design requirements will be dependent upon those industrial pretreatment requirements.

500.11 GREASE INTERCEPTORS

All restaurants and other facilities which discharge grease into the District's sewers shall be required to use grease traps or grease interceptors to minimize grease problems in collection systems and treatment plants. The minimum interceptor size shall be 750 gallons. All interceptors shall be equipped with automatic draw-off devices for easier removal of accumulated grease. Small kitchens may install grease traps instead of interceptors, with the approval of the District Engineer. Comply with Appendix 15 and the Uniform Plumbing Code for sizing.

It will be the responsibility of the owner of each facility to maintain proper operating order of the interceptor unit and to remove accumulated grease at suitable intervals to avoid excessive buildup in the unit. The Marina Coast Water District approves the location and design of the interceptor unit.

500.12 STANDARD SEWER NOTES

Standard sewer notes to be included on all sewer system construction plans shall be as follows:

1. The sewer system as shown on these plans shall be constructed in accordance with the standard plans and specifications of the Marina Coast Water District. Contractor shall keep a copy of the standard specifications and drawings on the jobsite at all times.

2. The Marina Coast Water District shall be notified at least 48 hours prior to commencing work on the sewers. Phone (831) 384-6131 for inspection. A preconstruction meeting shall be held at least 24 hours before starting construction.

3. Sewer Connection: 4-inch house connection is to be constructed from the sewer main to the property line for each lot.

4. All sewer house connections shall be placed prior to surfacing of streets.

5. All sewer lengths are calculated on horizontal distances along the centerline of the sewer.

6. Pressure testing of sewers shall be in accordance with the standard specifications of the Marina Coast Water District.

7. 00+00.00 shown on sewer profile denotes stationing along centerline sewer from downstream manhole.

8. In order to prevent accidental use of the new sewer prior to completion and acceptance, the outlet or inlet to existing tie-in manhole(s) shall be sealed with broken brick and mortar. Installation of these plugs shall be approved by the District. Plugs shall be removed at the time of final acceptance.

9. Contractor shall verify the horizontal and vertical location of all utility crossings before constructing any sewers in this project.

10. Contractor's surveyor shall stake the location of all wye fittings. All house laterals not normal to street sewer to have end of lateral at property line staked and tied to a property corner as shown on the plans.

11. The Marina Coast Water District will inspect and maintain all manholes and main line sewers. The District will inspect laterals from the main to the building line, but maintain only to the property line/clean-out. The local building department or appropriate governing agency will inspect and verify building connections to the laterals.

12. The Contractor shall conduct all tests as required in the presence of the District representative.

13. Any work to be performed inside a live manhole shall be done in accordance with Cal OSHA "Confined Spaces" and District manhole entry regulations. Manhole entry without District personnel present is not allowed.

14. All sewer manhole lids are to have "MCWD" cast thereon as shown in Standard Plan S-3 of Marina Coast Water District's "Standard Plans and Specifications for Construction of Domestic Water, Sewer and Recycled Water Facilities."

15. The applicant is to provide the Marina Coast Water District with a record drawings set of job prints with tie-down measurements for all laterals and manholes.

16. Curb face shall be inscribed with an "S" indicating location of all sewer laterals.

END OF SECTION

SECTION 600

DESIGN CRITERIA
RECYCLED WATER FACILITIES

600.1 GENERAL

All potential uses of recycled water, including, but not limited to, uses for landscape irrigation systems, agricultural irrigation systems, systems used for industrial process or construction purposes, or recreational impoundment systems, or flushing toilets and urinals in non-residential buildings shall be reviewed by the District. If recycled water is to be used, (Refer to the MCWD Code, Title 4.28.080) the facilities shall be constructed in accordance with the procedures and requirements set forth below.

This section is generally divided into seven sub-sections. The sections are:

Section 600.1 General
Section 600.2 Off-Site Recycled Water Facilities Design and Construction Standards
Section 600.3 Recycled Water for Construction Grading or Other Temporary Use
Section 600.4 General Requirements for On-Site Recycled Water Facilities
Section 600.5 Design Requirements for On-Site Recycled Water Facilities
Section 600.6 Inspection Requirements for On-Site Recycled Water Facilities
Section 600.7 Interior Use of Recycled Water in Non-Residential Buildings

The Marina Coast Water District (MCWD) recycled water program is regulated by the California Department of Health Services and the Monterey County Health Agency and permitted by the RWQCB. As set forth in the District's "Water Code for Water, Sewer, and Recycled Water Service," the District shall determine whether a given service will be furnished with recycled water or potable water. The determination shall be in accordance with the standards of treatment and water quality requirements set forth in Title 22, Chapter 4 of the California Administrative Code, with the intent of the District to work in conjunction with the health agencies to protect the public health, and with the availability and/or feasibility of making available recycled water facilities. All on-site facilities using recycled water will have an annual cross connection test and annual backflow prevention certification unless otherwise approved by the state and county health agencies based on a case by case basis. Details of specific cross connection tests can be found in subsequent sections. All inspections and any cross connection found are reportable to both state and county health agencies.

600.1.1 Recycled Water Site Categories

Recycled water facilities are separated into two categories.

Off-site recycled water facilities typically consist of those recycled water facilities, which are, or will be, owned, operated, and maintained by the District such as transmission or distribution mains in public rights of way. Typically these are facilities on the upstream side of the water meter and include the meter.

On-site recycled water facilities typically consist of facilities, which will be owner, operated, and maintained by the customer, and is downstream of the water meter. The District typically constructs, operates, and maintains recycled water facilities, upstream of the water meter, which are 4" and larger. There are two types of on-site recycled water facilities; non-residential on-site recycled water facilities and residential dual plumbed homes.

600.1.2 Recycled Water System Monitoring

Authorized representatives of MCWD shall monitor and inspect the entire recycled water system including both On-site and off-site facilities. MCWD shall conduct monitoring programs, maintain a record as deemed necessary, and provide reports as requested by regulatory agencies. The Manager or authorized representatives of MCWD, in carrying out these functions, shall have the right to enter the customer's premises during reasonable hours for the purpose of inspecting On-site recycled water facilities and areas of recycled water use and to ensure compliance with the Water Code. This shall include the provision that runoff shall be controlled and limited and the provision that cross-connections between potable water facilities and recycled water facilities do not exist.

For single-family residences receiving recycled water, the permit holder shall be responsible for providing access and cooperation to MCWD's representative so that MCWD's representative can perform an annual cross-connection inspection. This inspection shall include pressure testing of the recycled water system to verify that no cross-connections have been made. The permit holder will be responsible for correcting any work which violates MCWD regulations at their expense including any costs associated with repairing and testing the backflow device. In addition, if the permit holder changes, an AWWA certified cross-connection specialist from the Water Quality Dept. of MCWD will perform a cross-connection survey to verify that no cross-connections exist.

600.2 OFF-SITE RECYCLED WATER FACILITIES DESIGN AND CONSTRUCTION STANDARDS

600.2.1 Minimum Size

The typical minimum size distribution main shall be a 4-inch looped line. Smaller diameter mains may be individually approved by the District Engineer on dead-end mains or the possibility of future tie-ins with other mains. These mains shall be sized so that sufficient water is regularly drawn to prevent stagnation. Only 1-inch and 2-inch copper or polyethylene and 4-inch, Class 150 PVC are approved for service lines.

Developer facilities will be those recycled water mains of any diameter found interior to the developer's project, refer to MCWD In-Tract Policy.

Developer facilities designed by the developer shall be approved by the District and transferred to the District upon satisfactory completion of final inspection. Capital facilities will be designed and constructed by the District in most cases. The facilities found on the private parcels downstream of the meter shall remain in the ownership of the developer.

600.2.2 Approved Pipe Materials

C-900 PVC pipe Class 150 shall be used for recycled water mains up to 12-inch in diameter. The pipe shall be purple in color and shall be marked in accordance with District standards to warn anyone who sees it that there is recycled water in the pipe. A purple polyethylene sleeve may be provided in lieu of a purple pipe. DIP may be used if properly sleeved and marked with purple marking tape.

600.2.3 Minimum cover requirements

The top of all recycled water distribution mains shall be a minimum of 48 inches below the finished street grade unless indicated otherwise on job plans or directed otherwise by the District Inspector because of unusual field conditions.

600.2.4 Separation between Water, Sewer, and Recycled Water Lines

See Section 400 and District Standard Plan W-17.

600.2.5 Standard location

Recycled water pipes shall typically be located either four (4) feet, or eight (8) feet from the curb face on the opposite side of the street from the potable water mains.

600.2.6 Standard Off-Site Recycled Water Notes

The following notes must appear on all plans for construction of off-site recycled water facilities and be identified as "Recycled Water Notes". In addition the Standard Water Notes shown in Section 400 of these Guidelines must appear on the plan as well.

1. Recycled water systems shall be constructed in accordance with the requirements of the Districts potable water system design requirements.

2. Recycled water pipe shall be purple PVC C-900 pipe, Class 150, marked as required by District standards to identify it as recycled water. DIP may be used with the approval of the District, marked with purple sleeve and marking tape.

3. All 1-inch and 2-inch copper or polyethylene services shall be wrapped continuously with purple marking tape or sleeve from end to end.

600.3 RECYCLED WATER FOR CONSTRUCTION GRADING OR OTHER TEMPORARY WATER USE.

The following are MCWD procedures and guidelines for the specific use of recycled water for construction grading, dust control, compaction and temporary reservoirs.

Recycled water is to be used only for the above mentioned uses and may not be used for any other purpose than stated above. There are no exceptions. If there is a need for water other than the above approved uses, i.e.: water to construction trailers, hand washes, hose bibs, and temporary sprinklers etc., one must obtain an approved potable connection from MCWD.

1. All construction connections shall be tagged with warning tags, as follows:

   “Warning - Recycled Water, Do Not Drink"
   "Aviso - Agua Impura, No Tomar"

   Use tags as manufactured by T. Christy Enterprises or approved equal. Tags shall be affixed to stationary tanks, water trucks, and all service points or any other inlet or outlet using recycled water.

2. Water trucks, water tanks, or any other receptacle, including but not limited to pipe or hose used for storage or conveyance of recycled water, shall be dedicated solely to that use. Any use other than recycled water must be approved through MCWD and the cognizant health agencies.

3. No fittings, hose or pipe, or any other appurtenance using recycled water shall connect to a potable water source.

4. All PVC pipe extending from the point of connection shall be purple, and read:

"Warning - Recycled Water, Do Not Drink"

The PVC piping shall conform to all material specifications as set forth by MCWD.

5. Any water truck, water tank, or other storage receptacle to be converted from recycled water to potable water shall be thoroughly cleaned and disinfected to the satisfaction of MCWD and the jurisidctional health agencies.

6. Contact MCWD prior to connection at (831) 384-6131 and arrange for an inspection to ensure compliance with District standards.

Failure to comply with any or all of the above requirements places your construction site in violation of District Water Code, and will result in termination of service until the appropriate corrective steps have been taken.

600.4 GENERAL REQUIREMENTS FOR ON-SITE RECYCLED WATER FACILITIES

Plan check procedures shall follow the guidelines outlined in Section 100.5, Application Processing.

600.4.1 Scope

Design and construction standards for sites using recycled water are provided for non-residential and residential dual plumbed home sites.

- Non-residential on-site recycled water facilities include, but are not limited to: landscape irrigation systems, systems used for industrial processes, construction purposes, and toilet and urinal flushing in non-residential buildings. Users shall comply with these standards, the On-Site Recycled Water User Plan, and to any conditions, standards, and requirements set forth by the District in addition to these standard specifications.

- Residential dual plumbed homes using recycled water for landscape irrigation systems shall comply with these standards set forth herein, the Engineer's Report, and to any conditions, standards, and requirements set forth by the District in addition to these standard specifications. Residential indoor water use of Recycled Water is prohibited.

600.4.2 Interpretation

The District Engineer shall decide all questions of interpretation of "good engineering practice," guided by the various standards and manuals.

600.4.3 Applicable Codes and Policies

Ordinances, requirements, and applicable standards of governmental agencies having jurisdiction within the District's service area shall be observed in the design and construction of on-site recycled water systems. Such requirements include but are not limited to current revisions of the following:

- The Uniform Plumbing Code.

- Marina Coast Water District Water Code, as applicable.
- State of California, Department of Health Services, Title 22.
- Regional Water Quality Control Board Regulations.

600.4.4 Marina Coast Water District Jurisdiction

The District is responsible for the approval of plans and inspection of all on-site recycled water systems within the District's service area. Where repairs or replacement of a service line on the upstream side of the meter is required, it shall be the responsibility of the District, unless it is a system upgrade, in which case the owner or customer will be billed for the work. Conversely, the cost of repairs or replacement of the on-site facilities shall be the responsibility of the property owner.

600.4.5 Developer's Engineer/Landscape Architect Responsibility

These standards establish uniform policies and procedures for the design and construction of on-site recycled water facilities. They are not intended to be a substitute for knowledge, judgment, or experience. The contained procedures shall be reviewed by the engineer/landscape architect and shall be applied as necessary to the project. Proposed deviations to these standards shall be submitted in writing in conjunction with the plan review submittal. The plans shall be revised or supplemented at any time it is determined that the District's requirements have not been met.

Before design, the developer should obtain the following from the District:

1. Approval to use recycled water for the proposed system, as stated in the previous section.
2. Verification of locations and size of proposed points of connection (meter facilities).
3. Design pressures for the proposed facilities.

600.4.6 Reference Specifications

References to standards such as the Standard Drawings of the District, AWWA, ASTM, UBC, UPC, and UFC shall refer to the latest edition or revision of such standards unless otherwise specified.

600.4.7 Guidelines For Landscape Irrigation with Recycled Water

The following guidelines have been established by the Marina Coast Water District in conjunction with the Monterey County Health Department and the Central Coast Regional Water Quality Control Board. They are intended to provide the basic parameters for the use of recycled water in landscape irrigation. To operate your system in compliance with these guidelines you must:

1. Irrigate between the hours of 9:00 p.m. and 6:00 a.m. only. Watering outside this time frame must be done manually with qualified supervisory personnel on-site. No system shall at any time be left unattended during use outside the normal schedule.

2. Irrigate in a manner that will minimize runoff pooling and ponding. The application rate shall not exceed the infiltration rate of the soil. Timers must be adjusted so as to be compatible with the lowest soil infiltration rate present. This procedure may be facilitated by the efficient scheduling of

the automatic control clocks, (i.e., employing the repeat function to break up the total irrigation time into cycles that will promote maximum soil absorption).

3. Adjust spray heads to eliminate overspray onto areas not under the control of the customer. For example, pool decks, private patios, streets and sidewalks.

4. Monitor and maintain the system to minimize equipment and material failure. Broken sprinkler heads, leaks, unreliable valves, etc., should be repaired as soon as they become apparent.

5. Educate all maintenance personnel, on a continuous basis, of the presence of recycled water, and the fact that it is not approved for drinking purposes. Given the high turnover rate of employees in the landscape industry, it is important that this information be disseminated on an almost daily basis. It is you, the landscape contractor, who is responsible for educating each and every one of your employees.

6. Obtain prior approval for all proposed changes and modifications to any on-site facilities. Such changes must be submitted to, and approved by, the Engineering office and designed in accordance with District standards.

Failure to comply with any or all of the above guidelines puts your system in violation of the District's Water Code, and will result in termination of service until the appropriate corrective steps have been taken.

600.4.8 Prohibitions and Limitations

Design of on-site recycled water facilities shall conform to the following:

- The recycled water system shall be separate and independent of any potable water system. Cross connections between potable water facilities and recycled water facilities are prohibited.

- Hose bibs on recycled water facilities are prohibited. Quick couplers are prohibited for residential dual plumbed homes. Where potable and recycled water is used on-site, potable water hose bibs must be attached to the building.

- Drinking fountains shall be protected from the spray of recycled water in a manner approved by the On-Site Recycled Water User Plan, prior to installation.

- Patios, swimming pools, and spas, etc. shall be protected from the spray of recycled water.

- Overspray and run-off shall be limited or prevented.

- Potable and recycled water lines must maintain proper separation at all times.

- Recycled water shall not be used for any purpose other than the approved uses as set forth in the On-Site Recycled Water User Plan.

- The system shall be designed to irrigate the on-site area within the allowable time periods as set forth in the On-Site Recycled Water User Plan.

600.4.9 Backflow Prevention and Cross Connection

Backflow prevention devices will not be required on the recycled water service connected to a recycled water main. However, in accordance with Section 400, District's Regulation Regarding Cross Connection, reduced pressure backflow prevention devices will be required on the potable water service, when a parcel receives potable and recycled water service. No connection between the recycled waterline and the potable waterline is allowed.

600.4.10 Conversion from Potable to Recycled Water System

In general, all irrigation facilities converting from a potable to a recycled water supply shall conform to the District's construction specifications and the On-Site Recycled Water User Plan. The District will notify the required state agencies of the intent to convert and solicit their involvement through out the process. The facilities to be converted shall be investigated in detail including review of any record drawings, preparation of the required On-Site Recycled Water User Plans, potholing of existing facilities, and determinations by the District of measures necessary to bring the system into full compliance with these standard specifications. The applicant, owner, or customer shall pay all costs to convert the system.

600.4.11 Conversion from Recycled to Potable Water System

If due to any system failure, use violations, or other reasons as determined by the District, it becomes necessary to convert from a recycled water supply to a potable water supply, it shall be the responsibility of the owner, applicant, or customer to pay all costs for such conversion. After notifying state and county health agencies of the intent of the conversion, the recycled water service shall be removed and plugged at the District main or abandoned in a manner approved by the District and State Agencies. The on-site non-residential facilities shall be modified, as required by the District and State Agencies, for use as a potable water system. The onsite system will then be disinfected in accordance with the following procedures.

1. Disinfect the water line following AWWA Standard C651 and District Standard Specification 15041. The final test results must be acceptable to MCWD before recharging the system.
2. Install approved backflow devices on any and all meter connections.
3. Remove the special recycled water quick couplers and their replacement with approved quick coupler valves for potable water systems.
4. Notify all personnel involved.
5. Remove all warning labels.

Installation of all potable water lines and payment of all connection fees due, as provided for in the Summary of Fees and Charges, Appendix 11.

600.4.12 Recycled Water Facilities with Temporary Potable Water Service

As set forth in the MCWD Water Code, where recycled water is not immediately available for use when the design area is ready for construction, and if the District has determined that recycled water will be supplied in the future, the on-site facilities shall be designated to use recycled water. The on-site system shall be designed and constructed to the District's construction specifications as set forth herein. Provisions shall be made as directed by the District and these specifications to allow for connection to the recycled water facilities when they become available. In the interim, potable water will be supplied to the recycled water facilities through a temporary potable water connection. Until recycled water is available, potable water rates will be charged as set forth in the District's published rate schedule..

A backflow prevention device acceptable to the local Health Department and the District will be required on

all non-potable systems served from a potable water main. If a recycled water distribution system is constructed as part of a subdivision development, the backflow prevention device may be installed at the point where the recycled main is connected to the potable system, instead of installing devices at every irrigation meter.

Reduced pressure backflow prevention devices are required on all potable water services to sites served with recycled water. The backflow prevention device shall be downstream of the meter and a part of the on-site facilities. If recycled water is not available at the time of construction and potable water is used for irrigation as described above, backflow prevention devices will not be required on the potable services, but sites must be plumbed to allow the addition of these devices at the time recycled water becomes available.

600.4.13 On-Site Recycled Water User Plan Preparation

Upon receipt of a request for recycled water service and irrigation or building plans, an On-Site Recycled Water User Plan will be prepared. The On-Site Recycled Water User Plan (URP) may be prepared by a Registered Engineer of the Owner's choice or by the District staff, at the Owner's expense. The District has available a sample copy of a URP which may be used in preparation.

600.4.13.1 Owner Responsibilities

The applicant, owner, or customer shall have the following responsibilities in relation to operation of On-Site facilities:

1. To make sure that all operations personnel are informed and familiarized with the use of recycled water.

2. To furnish their operations personnel with maintenance instructions, controller charts, and record drawings to ensure proper operation in accordance with the On-site facilities design and these Water Code.

3. To notify MCWD of any and all updates or proposed changes, modifications, or additions to the On-site facilities, which changes shall require approval by MCWD and shall be designed and constructed according to these requirements and standards and in the Water Code. In accordance with the above, changes must be submitted to MCWD for plan review and approval prior to construction. The construction shall be inspected by MCWD, and revised record drawings shall be approved by MCWD. MCWD may, if it deems such to be in the best interest of MCWD, waive or modify any of the foregoing.

4. The recycled water facilities must be maintained in accordance with the Water Code including MCWD's requirements and standards.

5. The operation and control of the on-site system shall prevent direct human consumption of recycled water and control and limit runoff. The applicant, owner, or customer shall be responsible for any and all subsequent uses of the recycled water. Operation and control measures to be utilized in this regard shall include, where appropriate, but not be limited to the following:

    A. On-site recycled water facilities shall be operated to prevent or minimize discharge onto areas not under control of the customer. If sprinklers are used adjacent to sidewalks, roadways, and property lines, they shall be adjusted to confine the discharge from the sprinklers to the design area.

B. The operation of the On-site recycled water facilities shall be during the periods of minimal use of the service area. Consideration shall be given to allow a maximum dry-out time before the design area will be used.

C. Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design and operation of the recycled water facilities shall be compatible with the lowest infiltration rate of the soil present.

D. When the application rate exceeds the infiltration rate of the soil, automatic systems shall be utilized and programmed to prevent or minimize the ponding and runoff of recycled water. The sprinkler shall not be allowed to operate for a time longer than the landscape's water requirement. If runoff occurs before the landscape's water requirement is met, the automatic controls shall be reprogrammed with additional watering cycles of shorter duration to meet the requirements. This method of operation is intended to control and limit runoff.

E. Report shall be made to MCWD of any and all failures in applicant, owner, or customer's system that cause an unauthorized discharge of recycled water.

6. Project shall comply with any and all applicable Federal, State, and local statues, ordinances, regulations, contracts, the Water Code, and all requirements prescribed by the District Manager and the Board. In the event of violation, all charges and penalties shall be applied and collected by MCWD.

600.4.13.2 Data Required for On-Site Recycled Water User Plan

Specific information is required to be incorporated in the On-Site Recycled Water User Plan. A list of the required information and an example of the URP can be found in Appendix19.

General guidelines for the On-Site Recycled Water User Plan should conform to the following:

1. The on-site recycled water irrigation facilities shall be designed to meet the peak moisture demand of all plant materials used within the design area. Comply with the irrigation design requirements of Section 700.

2. On-site recycled water facilities shall be designed to prevent discharge onto areas not under control of the customer. Part circle sprinklers shall be used adjacent to roadways and property lines to confine the discharge from sprinklers to the design area.

3. On-site recycled water irrigation facilities shall water only between the hours of 9 p.m. and 6 a.m., or as directed by the District Engineer. Consideration shall be given to allow a maximum dry out time before the design area will be used by the public.

4. The total time required to irrigate the design area shall not exceed 9 hours in any 24-hour period. Irrigation systems shall be designed to operate within this time requirement.

Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil or the ET requirements of the plantings. Where varying soil types are present, the design of the recycled water facilities shall be compatible with the lowest infiltration rate present. Copies of the developer's soils test reports shall be made available to the District upon request. The MCWD water conservation requirements shall apply.

600.4.13.3 User Supervisor

MCWD shall be kept informed of the identity of the person responsible for the water piping systems on all premises covered by these regulations. At each premise a "User Supervisor" shall be designated. This User Supervisor shall be responsible for the installation and use of pipelines and equipment and for the prevention of cross-connections.

In the event of contamination or pollution of the potable water system due to a cross-connection on the premises, the local health officer and District shall be promptly notified by the person responsible for the water system so that appropriate corrective measures may be taken.

1. User Supervisor Training Program - If there is a non-resident owner, a local User Supervisor shall be appointed. For single-family residences which have a recycled water service connection, the owner shall be considered to be the "User Supervisor" unless otherwise indicated on the application for the service connection request. In the event that someone other than the owner is designated as the "User Supervisor" and this person is no longer associated with the property, the owner shall again be considered the "User Supervisor" until written notification is made to MCWD.

2. Water Service Termination - When MCWD determines that water uses or conditions encountered by MCWD represent a clear and immediate hazard to MCWD's water supply that cannot be immediately abated, MCWD shall institute the procedure for discontinuing water use.

   Conditions or water uses that create a basis for water service termination shall include, but are not limited to, the following.

   A. Refusal to install a required backflow prevention device.

   B. Refusal to test a backflow prevention device.

   C. Refusal to repair a faulty backflow prevention device.

   D. Refusal to replace a faulty backflow prevention device.

   E. Refusal to install a RPBP on the potable service when recycled water is provided on site.

   F. Director or indirect connection between the potable water system and a sewer or recycled water system.

   G. Unprotected direct or indirect connection between the potable water system and a system or equipment containing contaminants.

   H. Unprotected direct or indirect connection between the potable water system and an on-site auxiliary water system.

   I. A situation which presents an immediate health hazard to the potable water system, as determined by the health agency or MCWD.

   J. At single-family residences where copper piping is not installed for the water service or purple PVC pipe not meeting District Procedural Guidelines and General Design Requirements is not installed for the recycled water service.

MCWD will terminate service to a customer's premise after written notices have been sent specifying the corrective action needed and the time period in which it must be completed. If no action is taken within the allowed time period, water service may be terminated in accordance with the District Water Code.

MCWD will make reasonable effort to advise the water user of intent to terminate water service. Then, MCWD will terminate the water service and lock the service valve in the closed position. Water service will not be reinstated until correction of all violations has been approved by MCWD. Failure to correct the violations may result in permanent termination of water service in accordance with District Water Code.

600.4.13.4 On-Site Recycled Water User Plan Acceptance

Once the On-Site Recycled Water User Plan has been prepared, it will be submitted to the State of California, Department of Health Services and Regional Water Quality Control Board for review. Once comments have been received from each agency and incorporated into the document, an agreement has been signed by the user, proper signage has been installed, and training in the use of recycled water has been provided, recycled water service can be delivered to the site.

600.4.14 Agreements

Before recycled water can be supplied to a site, a Standard Agreement for Use of Recycled Water must be signed and recorded. The Agreement sets forth the requirements for service and includes guidelines for the use of recycled water.

In a residential dual plumbed subdivision, all homes are required to use recycled water for landscape irrigation. Deed restrictions are detailed in the documents "Declaration of Restrictions Regarding The Use of Recycled Water for Landscape Irrigation" (See Appendix 20) and "Homebuyer Notification, The Use of Recycled Water for Landscape Irrigation" (See Appendix 21).

600.5 DESIGN REQUIREMENTS FOR ON-SITE RECYCLED WATER FACILITIES

The Marina Coast Water District provides the highest quality unrestricted use recycled water for public landscape irrigation as well as residential irrigation. This section provides detailed steps for design review, construction inspection, compliance inspections, and tests for non-residential and residential dual plumbed irrigation systems.

600.5.1 Data Required on Plans

Specific information is required to be included in the plan set as described below.

1. General On-Site Recycled Water Notes - On-site recycled water notes are to be shown on all on-site recycled water system construction plans. The notes shall be as shown in Appendix 22.

2. Water service, meter and piping details, as required for potable systems in Section 400.

3. Irrigation details, as required in Section 700.

600.5.2 Drinking Fountains

Exterior drinking fountains must be shown and called out on the recycled water system plans. For schools, parks and sports fields, if no exterior drinking fountains are present in the design area, it must be specifically stated on the plans that none exist. The potable water line supplying the drinking fountain must have a warning tape and maintain proper separation from recycled water lines. Drinking fountains must be protected from the direct spray of recycled water either by proper placement within the design area or the use of a covered drinking fountain approved for this purpose.

600.5.3 On-Site Materials and Installation Requirements

600.5.3.1 Pipe Selection

All buried on-site piping in the recycled water system shall be purple PVC pipe with stenciling identifying it as recycled water in accordance with the AWWA Guidelines for the Distribution of Nonpotable Water. Stenciling shall include; CAUTION RECYCLED WATER - DO NOT DRINK; nominal pipe size; PVC-1120; pressure rating in pounds per square inch at 73 degrees; and ASTM designations such as 1785, 2241, 2672, or 3139. Stenciling shall be placed continuous on two sides of the pipe. All on-site recycled water piping shall be installed in accordance with the Uniform Plumbing Code and all other local governing codes, rules, and regulations.

For Non-Residential Sites use:

- PVC constant pressure main line piping, 2 inches and larger, shall be rubber-ring joint, PVC Class 160, or solvent weld joint, PVC Class 315.
- PVC constant pressure main line piping, 1-1/2 inches and smaller, shall be solvent weld joint, PVC Schedule 40.

For Residential Dual Plumbed Homes use:

- Irrigation Mainline: Schedule 40 PVC solvent weld purple pipe with bell ends.
- Irrigation Lateral Lines: Class 150 PVC solvent weld purple pipe with bell ends.
- Irrigation Sleeving: Schedule 40 PVC purple pipe.
- All potable water lines in landscapes shall be copper lines. Examples of potable water uses are a pool, fountain, or other uses not designated as acceptable for recycled water.

600.5.3.2 Pipe and Fittings

PVC plastic pipe fittings shall conform to the following:

- PVC plastic pipe fittings shall be installed below grade.

- All PVC plastic pipe fittings shall be rigid PVC virgin Type I, minimum Schedule 40, with working pressure no higher than that of the pipe. Sockets shall be tapered to conform to the outside diameter of the pipe, as recommended by the pipe manufacturer. All Schedule 40 fittings shall conform to ASTM D 2466. Schedule 80 fittings shall conform to ASTM D 2464 and D 2467.

- PVC fittings shall be Schedule 40 solvent weld and factory manufactured, or Schedule 40 with rubber-ring joint.

600.5.3.3 Depth of Piping

For on-site non-residential recycled water piping, the minimum depth from finished grade to top of pipe

(minimum cover) shall be eighteen (18) inches. When crossing potable water mains, the recycled pipe shall be under the potable pipe.

600.5.3.4 Separation Requirements

See Section 400 and District Standard Plans W-20.

600.5.3.5 Warning Tape

1. General - Warning tapes shall be installed longitudinally above and centered on all pressurized mains (between the meter and the building or the irrigation control valve). The warning tape shall be installed continuous for the entire length of the pipe. All risers between the main line and control valves shall be installed with warning tape.

2. Recycled Water - Warning tape shall be purple plastic with black printing having the words "CAUTION: RECYCLED WATER LINE BURIED BELOW." See District Standard Specification 15151.

3. Potable Water - Warning tape shall be blue plastic with black printing having the words "CAUTION: DOMESTIC WATER LINE BURIED BELOW." See District Standard Specification 15151.

600.5.3.6 Sprinklers

Sprinklers shall be easily recognized as being used in a recycled water system. All sprinklers shall be purple in color or have purple snap-on caps for easy identification.

600.5.3.7 Quick-Couplers (Permitted for Non-Residential Sites Only)

Recycled Water - Quick-couplers may be used in recycled water systems and shall conform to the following:

A. Quick-couplers shall be constructed of brass with a purple snap-on cover and shall have a ¾ or 1-inch inlet. All recycled water quick-couplers shall be installed below grade in a purple round box designed for recycled water use.

B. The box cover shall have a warning with the following information: "RECYCLED WATER – DO NOT DRINK" in English and Spanish and shall be permanently stamped or molded into the cover. Also, the warning must have the international "Do Not Drink" symbol such as a glass of water with a slash through it. Locking covers may be required where accessible by the public.

Potable Water -

A. Quick-coupling valves used in potable water systems shall have a cover made of brass, metal, or yellow rubber or vinyl.

B. Quick-coupling valves intended for recycled water use are not to be used on potable water systems.

600.5.3.8 Warning Labels

Warning labels shall be installed on designated facilities, such as controller panels, water trucks, and temporary construction connections where designated by the District. The labels will notify the public that the system contains recycled water that is unsafe to drink. Warning labels shall be constructed of a purple weatherproof material with the warning permanently stamped or molded into the label, per District standard Specification 15151. The warning shall read: "RECYCLED WATER – DO NOT DRINK" in English and Spanish and include the international "Do Not Drink" symbol, such as a glass of water with a slash through it.

Irrigation controllers shall be labeled in English "ATTENTION – CONTROLLER UNIT FOR RECYCLED WATER." Attach inside controller cabinet door.

600.5.3.9 Valve Boxes

Valves, both above and below grade, shall be housed in an approved lockable purple valve box. A sign reading "CAUTION: RECYCLED WATER – DO NOT DRINK" shall be installed, as approved by the District. Other means of restricting public access may be required by the District.

All gate valves, manual control valves, electrical control valves, and pressure reducing valves for on-site non-residential recycled water systems shall be installed below grade in a purple valve box. Electrical and manual control valve boxes shall have a warning label permanently molded into or affixed onto the lid with rivets, bolts, etc.

600.5.3.10 Warning Tags

Tags shall be weatherproof plastic, 3" by 4", purple in color, with the words "WARNING - RECYCLED WATER - DO NOT DRINK" in English and Spanish, per District Standard Specification 15151.

All recycled water sprinkler control valves, pressure regulators, quick couplers, and isolation valves shall be tagged with purple warning tags.

One tag shall be attached to each appurtenance in one of the following manners:

1. Attach to valve stem directly with plastic tie wrap, or
2. Attach to solenoid wire directly with plastic tie wrap, or
3. Attach to the body of the relative appurtenance with a plastic tie wrap.

600.5.3.11 Signage

All areas where recycled water is used, shall be posted with conspicuous signs in a size no less than 8-inches high by 12-inches wide, that include the following wording: "RECYCLED WATER - DO NOT DRINK " in English and Spanish. Each sign shall also display the international "DO NOT DRINK" symbol, such as a glass of water with a slash through it.

600.5.4 Control of Runoff and Application Areas

On-site recycled water facilities shall be designed to prevent discharge or runoff onto areas not under control of the user.

The design of the on-site non-residential recycled water facilities shall provide for use during the periods of minimal access by the public. This time of day is as set forth in the On-Site Recycled Water User Plan. Consideration shall be given to allow a maximum dry out time before the design area will be used by the

public.

Recycled water shall be applied at a rate that does not exceed the infiltration rate of the soil. Where varying soil types are present, the design of the recycled water facilities shall be compatible with the lowest infiltration rate present. Copies of the developer's soils test report shall be submitted with the plan set for District review.

Spray heads shall be adjusted to eliminate overspray onto areas not under the control of the customer, i.e. pool decks, private patios, streets, and sidewalks.

600.5.5 Recycled Water System Design Guidelines for Front Yards – General Requirements

1. Recycled water service and domestic potable water service for each residential lot will be provided by the subdivision developer. The recycled water service is typically provided at the opposite lot end from the potable service.

2. Recycled water shall not be used for any other purpose except for irrigation. Recycled water lines shall not enter the house. Recycled water is prohibited for backyard irrigation.

3. The piping system for the recycled water irrigation system will be constructed and maintained to be easily differentiated from the potable water piping system. The recycled water system piping will be purple plastic pipe. See Recycled Water Irrigation System materials list for more information.

4. Drip irrigation systems are required for shrub plantings and some groundcover plantings. The use of drip systems within the dripline of the canopy of existing oak trees is required. This type of irrigation system tends to be more water efficient and water conserving than other systems due to the slow delivery rate of water (low volume) via plastic tubing directly to the rootball of the plant material. Environmental factors such as evaporation and wind tend to have the least effect on this type of irrigation system. Physical maintenance of this type of system is usually higher. Additionally, drip irrigation systems contribute minimally to soil erosion problems on sloped planting areas.

5. It is recommended to install purple irrigation PVC sleeves beneath driveways, walkways or other paved areas. Install the necessary number of sleeves, properly sized, to accommodate the irrigation system mainline, lateral lines, and controller wiring.

6. Sprinkler heads and spray patterns shall be contained within the home lot property line and shall not overlap or overspray into the adjacent property. Adjust sprinkler heads and spray patterns to eliminate overspray onto adjacent hardscapes, patios, decks, pools, fences, etc.

7. Space and install sprinklers and turf rotors no more than 80% of the manufacturer's recommended radius listing for that particular head. Ensure head to head coverage of the spray pattern with no dry spots.

8. The maximum flow for each valve system shall not exceed 15 gallons per minute, nor shall operating flows exceed 15 gallons per minute at any one time.

9. For drip irrigation systems, install an in-line pressure- reducing valve down stream of the remote control valve. The pressure- reducing valve shall be placed below grade in a plastic valve box and adjusted to the proper operating pressure for the drip system.

10. For drip irrigation systems, install an in-line Wye filter down stream of the remote control valve and upstream of the pressure reducing valve. The filter shall be placed below grade in a plastic valve box. Install drip tubing a minimum of four inches below grade.

11. No backflow device is required on recycled water service.

12. A pressure reducing valve will be required by the District downstream of the recycled water meter below grade in a rectangular box of sufficient size to easily allow repair or replacement. Pressure reducing valve shall be pre-set at 40 psi.

13. Hose bibs and quick coupling valves are PROHIBITED on the recycled water systems serving residential front yards.

14. No white PVC piping will be allowed for recycled water irrigation system mainlines and laterals.

15. Overhead irrigation systems for turf will only be operated between the hours of 9:00 p.m. and 6:00 a.m. Drip irrigation systems will be allowed to be operated at anytime.

16. Monitor and maintain the system to minimize equipment and material failure. Broken sprinkler heads, leaks, unreliable valves, etc., should be repaired as soon as they become apparent.

17. Recycled water is not potable water and therefore not suitable for human consumption.

18. Recycled water is highly treated domestic wastewater and its clarity to the human eye is indistinguishable from domestic water. The standards imposed for treatment of recycled water quality are established by various governmental regulatory agencies, including the State of California Department of Health Services, California Code of Regulations, Title 22, and these standards may change from time to time.

19. Irrigate in a manner that will minimize runoff, pooling, and ponding. The application rate shall not exceed the infiltration rate of the soil. Timers will be adjusted so as to be compatible with the lowest soil infiltration rate present. This procedure may be facilitated by the efficient scheduling of the automatic control clocks (i.e., employing the repeat function to break up the total irrigation time into cycles that will promote maximum soil absorption). When using any type of irrigation system, care will be exercised by controlling the delivery rate of water so as not to overcome the soil's water absorption rate. Overwhelming the soil absorption rate may cause water run-off and soil erosion. Proper programming of the automatic irrigation controller, knowing the plant material's water needs, familiarity with the soil's water absorption characteristics and slope aspects are necessary for responsible water resource management and good irrigation practice.

20. All remote control valves shall be set below grade in an appropriate box. Anti-siphon control valves will NOT be allowed.

21. Educate all maintenance personnel, family members, and guests, on a continuous basis, of the presence of recycled water and that it is not approved for drinking purposes.

600.5.6 Potable Water System Design Guidelines – General Requirements

1. The potable water service and the recycled water service for each residential dual plumbed home will be provided by the homebuilder's underground contractor. See Section 400 for information regarding the District's regulations regarding cross connections.

2. The potable water system will be protected by an appropriate backflow prevention device at the potable water meter. An approved backflow prevention (BP) device is required on each residential potable water supply line, where a separate recycled water system will be used to irrigate the landscape. Assemblies will be installed downstream of, but immediately next to, the potable water meter and the pressure-reducing valve.

3. The BP device will be installed above grade and have a minimum clearance of twelve inches between the bottom of the assembly and the finished grade of the surrounding landscape or splash pad. Do not disturb the BP device or modify the grade around the assembly when landscaping the front yard. BP device that do not meet MCWD standards will be corrected at the owner's expense. Neither the owner nor their contractor may remove or modify the water meter or the BP device.

4. Warning tape shall be used on all constant pressure main line piping carrying potable water from the meter to the house. The tape shall start at the meter or pressure regulator, be visible in the valve box, and continue to where the pipe enters the house.

5. The water used within the residence and outside in the yard(s) through hose bibs will be potable water. All hose bibs shall be connected to the house.

6. Fill lines for pools and/or water features of any kind are prohibited on the recycled water system. These uses shall be connected to the potable water system. Copper pipe will be used for all potable lines. The location of the copper lines shall be indicated on the plans. The District requires the inspection of the installation prior to the covering of the pipe.

7. All pressure main line piping from the recycled water system shall be installed to maintain 10 feet minimum horizontal separation from all potable water piping. Where recycled and potable water pressure main line piping cross, the recycled water piping shall be installed below the potable water piping in a Class 200 purple-colored PVC sleeve which extends a minimum of 5 feet on either side of the potable water piping. Provide a minimum vertical clearance of 12 inches

600.6 INSPECTION REQUIREMENTS FOR ON-SITE RECYCLED WATER FACILITIES

600.6.1 General

The District will inspect the construction of on-site non-residential facilities and shall be notified two working days in advance of construction by the applicant, owner, or customer. The District Office shall be called at (831) 384-6131. In no case shall irrigation lines be backfilled before inspection by the District. If the residential dual plumbed on-site irrigation system is installed prior to plan approval and/or inspection, all or any portion of the system must be exposed and corrected as directed by the District in accordance with these standard specifications. Failure to comply will result in termination of service as provided for in the District Water Code.

Subsequent to plan approval, field conditions may dictate modifications to the on-site system either in material or in intended use. If directed by the District Inspector the owner, applicant, or customer shall perform all changes or modify the on-site system to bring the system or use into full compliance with these construction specifications and with the MCWD Water Code. If for any reason the system cannot be corrected or modified to the satisfaction of the District Inspector, the system will be subject to conversion to a potable water supply, as set forth herein.

At the start of construction of each house, MCWD inspectors will verify the following:

A. A backflow prevention device has been installed prior to any potable water use.
B. Water used during construction and for pipe testing is potable water and not recycled water.
C. Curb markings for potable and recycled water services are correct.

600.6.2 Documentation

Forms. All forms completed with regards to review and inspection will be kept on file at the MCWD offices for review by the Regional Water Quality Control Board or the Department of Health Services.

Landscape Record Drawings. MCWD will keep on file a copy of all landscape record drawings for both the front and back yards. The production houses front yard drawings, prepared by the homebuilder will be typical drawings that apply to many houses in the subdivision. Back yard drawings are prepared individually by homeowners or a landscape architect and therefore are individual to each house.

Inspections. MCWD staff will refer to previously completed forms as necessary when performing compliance inspections, cross connection tests, and inspections.

600.6.3 Testing of Backflow Prevention Devices

Backflow prevention assemblies require annual testing in accordance with the MCWD Water Code. See section 400.

600.6.4 Initial Cross Connection Test for Final Approval

If the on-site system is installed prior to plan approval and/or inspection, all or any portion of the system must be exposed and corrected as directed by the District in accordance with these standard specifications. Failure to comply will result in termination of service as provided for in Section 600.14 herein.

Notify in writing the state and county health agencies of the initial test date with intent that both agencies will attend. For the initial cross-connection test, recycled water will be used for the irrigation piping system. A cross connection shut down test form shall be completed (see Appendix 23). The procedures for the initial cross-connection test shall be as follows:

- Verify that the recycled water system is under pressure and operating normally. This is done by manually operating each valve and quick coupler attached to the recycled water system.

- Shut down the recycled water system at the meter service connection.

- Verify that the recycled water system does not have any pressure. This is done by opening a valve downstream of the recycled water connection to relieve pressure, allowing one hour of time to pass, closing the valve, then manually operating each valve and any quick couplers attached to the recycled water system.

- Verify that the potable water system to the lot is under pressure and operating normally. This step is done while the recycled water system is shut off at the meter. The test is accomplished by

manually operating all fixtures being supplied by the potable meter, both interior and exterior of the home or buildings.

- Shut down the potable water system at the backflow. Open the recycled system at the meter connection.

- Verify that the recycled water to the lot is under pressure and operating normally.

- Verify that the potable system does not have any pressure. This is accomplished by opening a valve downstream of the potable water backflow to relieve pressure, closing the valve, then manually operating all fixtures on the interior and exterior of the house or building being supplied by the potable water meter.

- Open the potable water system at the backflow. The test is now complete.

- Perform shutdown test on potable and recycled water systems at least once every four years and at change of occupant (rental or sale). Test shall be performed as outlined in Cross Connection Shutdown Test form.

600.6.5 Cross Connection Actions

On suspicion of existence of a cross connection, repeat the shutdown test. If the results confirm a cross connection, then proceed with the following:

- Inform the homeowner and contact MCWD Staff.
- Instruct the homeowner not to drink the tap water in the house.
- Turn off the recycled water to the property at the meter.
- Expedite the testing of the water quality in the house as well as in the supply system in the street.
- Investigate the source of the cross connection and eliminate it.
- If disinfection of the house potable water supply is necessary, it should be expedited with the cooperation of the homeowner.
- MCWD and DHS will determine when it is safe for the homeowner to resume the safe use of the recycled and potable water.

600.6.6 Annual Cross Connection Test for Individual Residential Lots

Annual testing for cross connections will be conducted on the on-site recycled water system by MCWD staff. The state and county health agencies will be notified of the annual test date and again the subsequent outcome of the test(s). The annual cross connection test shall in no case be less than 60 minutes and may be longer if site situations pose complications. The procedures for the annual cross-connection test shall be as follows

1. Verify the recycled water system is under pressure and operating normally. This is done by manually operating a valve or quick coupler attached to the recycled water system.

2. Leaving the valve or quick coupler open and running while shutting down the recycled water meter at the service connection. The recycled water system will be drained and remain inactive for 60 minutes.

3. At the end of the 60 minute shut down period, verify that the pressure in the recycled water system has completely dissipated through the open valve or quick coupler. A cross-connection is detected if the pressure has not completely dissipated, and the valve at the service connection is not leaking.

4. Open the recycled water service connection if a cross-connection was not detected.

5. The potable water shall remain pressured at all times during the annual recycled water shut down.

600.6.7 Coverage Test

The owner, applicant, or customer is responsible for controlling overspray and runoff of new systems. To ensure the limitation of overspray and runoff is in accordance with the On-Site Recycled Water User Plan, an inspection of the completed on-site non-residential system by the District is required. When the sprinkler system is completed and the planting installed, the owner or owner's representative shall contact the District at (831) 384-6131 and arrange for a coverage test walk through. The owner or owner's representative must be in attendance and have persons capable of making system adjustments. If modifications to the system are required, other than minor adjustments, the owner will be notified in writing of the changes required. To avoid termination of service, the modifications must be made in a timely manner. All modifications to the system are the responsibility of the owner, applicant, or customer and said owner, applicant, or customer shall pay all costs associated with such modifications.

600.6.8 Compliance Inspection and Testing

A. Testing and inspection of water systems in dual plumbed homes receiving recycled water will be in accordance with these procedures and the on-site Recycle Water User Plan. Random inspections may also occur. Complete Compliance Inspection Form (See Appendix 24)

B. Initially, before activation of recycled water service, and annually thereafter, MCWD will inspect both the exterior potable and full yard recycled water irrigation systems on the site. MCWD will perform a cross connection shutdown test initially, and thereafter, once every four years, and at changes of ownership. However, cross-connection tests may be performed by MCWD where, when, and if needed.

C. Backflow prevention assemblies shall be tested annually by the owner, with a copy of the results provided to the District.

D. For single-family residences receiving recycled water, the owner shall be responsible for providing access and cooperation to the District representative, to perform an annual cross-connection inspection or other system inspections that the District requires. This inspection shall include a visual check of the entire system to verify that no cross-connections have been made. The owner will be responsible for correcting any work, at their sole expense, which violates the District regulations. Complete Front Yard Design Review and Inspection Form (See Appendix 25) and the Back Yard Design Review and Inspection form (See Appendix 26).

E. No Recycled Water to Back Yard Irrigation. If a back yard irrigation system is installed, verify that it is connected to the potable water system through a backflow prevention device.

F. Homeowner Information. Provide the homeowner with literature regarding the design and construction and use guidelines of recycled water irrigation systems. (See Appendix 21)

G. Notice of Violation will be issued if the recycled water system does not comply with MCWD procedures. (See Appendix 27)

H. Inspect front and back yard annually for proper irrigation system and absence of cross connection.

600.6.9 District Acceptance

Upon completion of construction, final inspection by the District, submission of record drawings, approval of the On-Site Recycled Water User Plan, cross connection test, signing of a recycled water agreement, training, completion of the initial cross-connection test, and payment of any outstanding monies, the project shall be accepted by the District. The on-site Recycle Water Final Inspection Form will be completed. (See Appendix 27) At that time, service connection to the recycled water line may be made. The facilities shall be owned, operated, and maintained by the Owner.

600.6.10 Record Drawings

Record drawings shall be prepared and submitted to the District in accordance with the requirements of Section 300.

600.6.11 Failure to Comply

Failure to comply with any or all of the standards herein is a violation of the District Code and will result in termination of service until the appropriate corrective steps have been taken. Non-compliance with these standards may result in fines and other remedies available to the District.

600.7 INTERIOR USE OF RECYCLED WATER IN NON-RESIDENTIAL BUILDINGS

This comprehensive section, Interior Use of Recycled Water in Non-Residential Buildings, is written to address the planning, design, construction, operation and maintenance procedures, and responsibilities relative to non-residential buildings equipped with dual-plumbed water systems (potable water and recycled water). The recycled water portion of these dual systems provides water for toilet and urinal flushing, and floor drain trap priming. All other water demands in these buildings will be served from the potable water system.

This section is written in five parts to cover the five phases of development for a dual-plumbed non-residential building. These phases are planning, design, construction, start-up, and ongoing operations/monitoring. This five parts address the following:

1. The responsibilities and procedures of the Marina Coast Water District (MCWD).

2. The involvement of the state and county health agencies and the cognizant building authority.

3. The responsibilities and procedures to be followed by building owners, developers, contractors, and building maintenance personnel.

4. MCWD Water Code for the use of recycled water.

It is the intent of this section to ensure the safe and effective use of recycled water, and thereby conserve potable water resources.

600.7.1 Planning Phase

The planning of dual-plumbed non-residential buildings is a combined effort of MCWD, the cognizant building department, state and county health agency representatives, local building developers, and engineers. The processing of a proposed non-residential building follows the steps listed below.

1. Conceptual Design Phase - During this phase of the project, the developer engages the services of their staff or outside consultant to determine the feasibility of constructing a building in the MCWD service area. An assessment of the available water, and sewer service is made, along with the establishment of the requirements for service. In addition, the associated costs of obtaining building department approval, permits, and development credits are determined.

2. Under the current District Water Code, recycled water must be used for non-potable demands in non-residential sites if it is available, or in the determination of MCWD will be available in the near future. Exterior non-potable demands include construction dust control, watering for soil compaction and landscape irrigation. Interior non-potable demands are toilet and urinal flushing, and priming floor drain traps. Interior use of recycled water for non-potable demands must be approved by the local building department as well as the District.

3. Preliminary Design/EIR Phase - In conjunction with the preparation of preliminary design drawings for the project, the developer must secure development permits. This may involve a Conditional Use Permit (CUP) from the local regulatory agency, or an Environmental Impact Report (EIR) for the project. During the CUP or EIR process, a Notice of Preparation (NOP) is prepared and distributed to all affected agencies, including MCWD. Upon the determination that the proposed building is in an area currently being served recycled water, scheduled for conversion to recycled water, or master planned for recycled water, MCWD will respond back to the NOP that for the project to be supplied with an adequate water and sewer system, the building must be dual-plumbed. This response is then incorporated into the EIR or CUP as a condition of approval or required mitigation measure.

4. Design Phase - All recycled water dual distribution systems are designed in accordance with the Uniform Plumbing Code, the District Design Guidelines and the local building official's guidelines for non-potable water.

600.7.2 Design Phase

1. Recycled Water Use Specified - Recycled water supplied by MCWD, which complies with water quality requirements of the California Code of Regulations, Title 22, section 60307(a), may be used to supply toilets, urinals, and to prime floor drain sewer traps. Use is limited in these types of fixtures or facilities in non-residential buildings. Residential buildings are explicitly excluded from the list of approved uses. In all other uses and occupancies, potable water supply is required.

2. Determination to Use Recycled Water - Approval for the above uses in lieu of Uniform Plumbing Code requirements shall be considered and determined by MCWD (as set forth in MCWD's "Water Code for Water, Sewer, and Recycled Water Service") and the cognizant building authority (e.g., the City of Marina Administrative Authority) on a case-by-case basis. Ultimate use approval is reserved for the State Department of Health Services (DOHS) and the Monterey County Health Care Agency (MCHCA).

3. Design Criteria: Off-Site Recycled Water Facilities - Design of all off-site recycled water facilities shall be as set forth herein except as modified for specific on-site projects requiring approved engineers reports (See Appendix 22 for Design notes).

4. Off-Site Plan Check and Approval - Off-site recycled water facility design plans shall be reviewed and approved in accordance with the procedures outlined in MCWD's "Procedural Guidelines for the Construction of Water, Sewer, and Recycled Water Facilities," as last revised.

5. Design Criteria: On-Site Recycled Water Facilities - Design of all on-site recycled water facilities shall conform to the Uniform Plumbing Code as adopted by the responsible building authority and the following prohibitions and limitations:

   - The recycled water system shall be separate and independent of any potable water system.

   - Cross-connections between any potable water system and the on-site recycled water system are strictly forbidden.

6. On-Site Plan Check and Approval - The on-site recycled water facility construction plans shall be reviewed and approved in accordance with the procedures outlined in the Procedural Guidelines and General Design Requirements.

7. Service Agreement with MCWD - During MCWD's review of water utility plans for any development, the developer shall enter into a standard water service agreement with MCWD as set forth in MCWD's "Standard Agreement for the Construction of Water, Sewer, and Recycled Water Facilities," latest edition.

600.7.3 Construction Phase

1. Pre-Construction Conference - Before plumbing construction begins, the developer's contractor shall arrange a pre-construction conference at which will be present the developer's contractor's job superintendent, the plumbing contractor, and MCWD's On-Site Water Systems inspector. The purpose of this meeting will be to explain MCWD's inspection process, review MCWD's construction specifications, and discuss the construction schedule and any known circumstances that might affect job installation.

2. Inspection - The on-site recycled water and potable water systems shall be subject to inspection by MCWD and shall be left open and uncovered until approved by MCWD's On-Site Water Systems inspector, who should be contacted at MCWD's offices.

3. If any part of an on-site water system is to be installed and concealed within walls, ceilings, floors, or below grade prior to plan check approval and/or inspection, that part must be exposed for inspection approval by MCWD before closure. If any portion is completed without MCWD's inspection and approval, that portion not inspected will be re-exposed at the sole cost of the developer.

4. MCWD on-site inspection approval be secured subsequent to final approval of the water systems by the responsible building authority, and issuing of a final use approval.

5. Record Log - MCWD's Water Systems inspector will maintain a record log of all inspections for the building project. The record log will become a permanent part of MCWD's file for that project. The record log will consist of:

A. Photographs - Photographs will be taken of the completed recycled water facilities on each floor of the building to document proper installation. Each photo will include a sign, which clearly indicates the name of the project, the number of the floor, and the date of the inspection. The developed photographs will be placed in clear plastic sleeves and kept in MCWD's project file.

B. Inspection Reports - A written record of each inspection will be kept on a special, triplicate, carbonless-transfer inspection report form prepared by MCWD. All original copies will become a part of MCWD's project file. Copies of all inspection reports will be provided to the contractor's job superintendent, the various health agencies, and the responsible building authority, as requested.

6. Construction Specifications - Construction specifications for all on-site building recycled water systems shall be as set forth in Section 600.17, Appendix Section C, entitled, "Information Required on Plans."

600.7.4 Start-Up Phase

1. Initial Water Service - The on-site building recycled water system shall initially be filled, pressure tested, and operated with potable water.

2. Cross-Connection Testing - The following testing sequence will be followed for buildings that will have the internal recycled water systems connected to MCWD's recycled water supply before the building is occupied, and under certain subsequent circumstances.

   Before the building can be occupied, and before the responsible building authority will issue final use approval, the recycled water system must pass a thorough a cross-connection test. This same testing procedure will be used during the building's subsequent operation and maintenance under circumstances discussed in Part 5, Section A. The cross-connection test will be conducted under the supervision of an AWWA-certified Cross-Connection Control Program Specialist from the Water Systems Management Section of MCWD. The test will be performed in the presence of representatives of DOHS and MCHCA, representatives of the responsible building authority, and representatives of the building owner. MCWD will coordinate the scheduling of the test. Procedures for the cross-connection test shall be as set forth below:

   A. The recycled water to the building will be shut off at the recycled water meter. The recycled water riser will be drained, and the recycled water system will remain de-activated for a period of 24 hours.

   B. At the end of the 24-hour shutdown period, test all recycled and potable water fixtures, floor-by-floor, for cross-connection by operating each fixture and checking for flow or no flow in all restrooms, and where there are recycled and potable water supplied fixtures.

   C. If there is no flow detected in any of the fixtures (indicating no cross connection), reactivate the recycled water riser.

   D. The potable water to the building will be shut off at the back-flow device. The potable water riser will be drained, and the potable water system will remain de-activated for a period of 24 hours.

E. At the end of the 24-hour shutdown period, test all potable and recycled water fixtures, floor-by-floor, for cross connection by operating each fixture and checking for flow or no flow in all restrooms, and where there are potable and recycled water supplied fixtures.

F. If there is no flow detected in any of the fixtures (indicating no cross connection), reactivate the potable water riser.

G. For new installations only, disconnect the recycled water riser from the potable water pipeline, remove the reduced-pressure principle backflow prevention assembly (RPPA) at the potable water connection, and connect the recycled water riser to MCWD's recycled water supply.

MCWD will provide written verification of successful test results to the state and county health agencies and the cognizant building authority.

3. Response to Confirmed Cross Connection - In the event that a cross connection is discovered, the following procedure will be immediately activated:

A. Shut down the recycled water supply to the building at the meter and drain the recycled water riser.

B. Shut down potable water to the building at the meter.

C. Notify both the state and county health agencies, followed by a written notice within 24 hours. This notice will include an explanation of the nature of the cross connection, the date and time discovered, and the steps that were taken to mitigate the cross connection.

D. Uncover and disconnect the cross connection.

E. Shock the potable water system with 50 ppm of chlorine for 24 hours.

F. Flush the potable system after 24 hours and perform standard bacteriological testing. If test results are acceptable, recharge the potable water system in accordance with MCWD standards.

G. Re-test the building following the procedures listed in Section B above.

H. Obtain final approval from the state and county health agencies and the building authority and put the recycled water supply back into service.

4. Final Approval and Activation of Recycled Water Service - When all requirements listed below have been met, the on-site building recycled water system will then be filled and placed into operation with recycled water under the supervision of representatives of MCWD's Water Systems Section.

A. Both the potable and recycled on-site systems must have received plan approval, and must have been constructed and passed inspection as set forth in the provisions of this section.

B. Both the potable and recycled on-site systems must have passed the initial cross-connection test.

C. Final approval to use recycled water must be received from DOHS or MCHCA.

D. After health agency approvals, all signs must be posted in restrooms, equipment rooms, and plumber's closets, and all recycled water control valves and appurtenances must be sealed and/or tagged as set forth in this section. Signs, seals, and tags shall be installed under the supervision of MCWD.

E. Before recycled water is put into service, the MCWD inspector shall meet with the developer's/owner's designated user supervisor for building maintenance to discuss operating procedures and responsibilities.

600.7.5 Operation and Maintenance

1. Inspection and Testing Frequencies - Ongoing operation and maintenance of non-residential buildings with interior use of recycled water includes both cross-connection control inspection and testing. Inspections will occur annually, with procedures as described below. Testing will occur as often as annually, but no less often than once every four years upon approval by state and local health agencies, with procedures as described below.

   Determination of cross-connection control testing frequency will be based on a combination of factors: particular facility construction and recycled water use features, established facility inspection and testing performance history, cooperation by on-site staff and/or representatives, and ongoing evaluation by MCWD staff in concert with state health agency representatives. The initial testing frequency will not be less than annual. Subsequent lower or higher frequencies will be based on the above-noted factors and mutually declared and documented by MCWD staff and health agency representatives at the close of the previous testing event.

   Water system de-activation duration during testing will depend generally on testing frequency. For annual testing frequencies, a 1-hour water system de-activation will generally be adequate. For testing frequencies of greater than one year, a 24-hour water system de-activation will generally be adequate. Alternative water system de-activation duration will be used only by mutual consent of MCWD staff and health agency representatives.

2. Cross-Connection Testing - All buildings with interior recycled water systems will undergo a cross-connection test in accordance with the determinations of Section A above. Prior to commencing the cross-connection test, a dual system inspection will be conducted by MCWD's Cross-Connection Control inspector and the cognizant building authority in the presence of representatives of the state health agencies and representatives of the building owner, as follows:

   A. Check meter location of the recycled water and potable water systems; verify that no modifications have been made, or cross connections are visible.

   B. Check the potable water RPBP.

   C. Check all pumps and equipment, equipment room signs, and exposed piping in the equipment room.

   D. Check all recycled water control valves to make sure that seals are still in place and intact.

   E. Check all valve control door signs to verify that none has been removed.

F. Check all restroom entrance signs to make sure they are in place and visible.

G. Check all plumbers' closets and verify that all signs are in place.

For those circumstances requiring cross-connection testing with a 24-hour system de-activation, the procedures of Section 600 will be followed. For those circumstances requiring a 1-hour de-activation, the following procedures will be used:

The following testing sequence will be followed for buildings that will have the internal recycled water systems connected to MCWD's recycled water supply after the building is occupied, and under certain subsequent circumstances.

After the building can be occupied, but before the internal recycled water system can be connected to MCWD's recycled water supply, the recycled water system must pass a thorough a cross-connection test. Buildings that have been previously approved for internal recycled water use, and have been tested for cross connections will also use this sequence, under circumstances discussed in Section A above. All testing will be conducted under the supervision of an AWWA-certified Cross-Connection Control Program Specialist from the Water Quality Department's Cross-Connection Control Group of MCWD. The test will be performed in the presence of representatives of DOHS and MCWD, representatives of the responsible building authority, and representatives of the building owner. MCWD will coordinate the scheduling of the test. Procedures for the cross-connection test shall be as set forth below:

A. The recycled water to the building will be shut off at the recycled water meter. The recycled water riser will be drained, and the recycled water system will remain de-activated for a period of 1 hour.

B. At the end of the 1-hour shutdown period, test all recycled and potable water fixtures, floor-by-floor, for cross connection by operating each fixture and checking for flow or no flow in all restrooms, and where there are recycled and potable water supplied fixtures.

C. If there is no flow detected in any of the fixtures (indicating no cross connection), reactivate the recycled water riser.

D. The potable water to the building will be shut off at the back-flow device. The potable water riser will be drained, and the potable water system will remain de-activated for a period of 1 hour.

E. At the end of the 1-hour shutdown period, test all potable and recycled water fixtures, floor-by-floor, for cross connection by operating each fixture and checking for flow or no flow in all restrooms, and where there are potable and recycled water supplied fixtures.

F. If there is no flow detected in any of the fixtures (indicating no cross connection), reactivate the potable water riser.

G. For new installations only, disconnect the recycled water riser from the potable water pipeline, remove the reduced pressure principle backflow prevention assembly (RPPA) at the potable water connection, and connect the recycled water riser to MCWD's recycled water supply.

MCWD will provide written verification of successful test results to the state and county health agencies and the building authority. This verification will be accompanied by the declaration, mutually agreed among MCWD and the health agencies, of subsequent testing frequency for the subject site.

3. Emergency Response to Confirmed Cross Connection - In the event that a cross connection is discovered, the procedures detailed in section 600.14.4, START-UP PHASE, Section B, will be immediately followed.

4. Cross-Connection Inspection - In addition to the detailed cross-connection control testing described herein, MCWD's Cross-Connection Control Specialists will perform annual inspection of all buildings with dual-plumbed systems. This will consist of at a minimum, visual inspection of pump rooms, all bathrooms, signs, tags, etc. Other elements of the annual inspection may consist of, but are not necessarily limited to, the following specific items:

   A. Run random water sample tests (laboratory samples) on recycled water and potable water.

   B. Check walls for visible repairs that might indicate that plumbing changes may have occurred.

   C. Check plumber's closets to see if valve seals have been broken.

   D. Check with the user supervisor to ask whether any routine operations or maintenance work has been performed on plumbing systems.

   MCWD personnel will keep a record of all inspections, which will become a part of MCWD's project file for each related building. As a general guideline, MCWD will randomly select and inspect 10 percent of the water related facilities within a building and will consider the results.

5. User Supervisor Responsibilities - Each building provided with recycled water for the flushing of toilets, urinals, and floor drain trap priming shall have a user supervisor designated by the owner/developer to maintain strict control over interior recycled water usage. MCWD will provide the name of this person to the responsible building authority and to the state and county health agencies. The user supervisor is responsible for the following:

   A. Maintaining strict control over the building's water systems.

   B. Controlling cross connections.

   C. Immediately informing MCWD's Engineering Department at (831) 384-6131 of any water system failures or emergency shut downs.

   D. Informing MCWD's Engineering Department in advance of scheduled shut-downs for system maintenance.

   E. Informing and providing MCWD's Engineering Department with plans for proposed changes to the plumbing systems.

6. Non-Compliance - Failure to comply with the published "MCWD Water Code," and with the provisions of SECTION 600.17, shall constitute the basis for terminating recycled water service to the building for all approved uses. The specific procedures and conditions for the termination

of recycled water service are contained in the service agreement, and in the "MCWD Water Code."

7. MCWD Records - MCWD will maintain a database and written records of all dual-plumbed non-residential buildings in the MCWD service area in order to document, track, and schedule all tests. Reports will be provided to the state and county health agencies and the responsible building authority for all dual-plumbed facilities in the MCWD service area.

END OF SECTION

SECTION 700

DESIGN CRITERIA FOR LANDSCAPING AND IRRIGATION SYSTEMS

700.1 DESCRIPTION

These Marina Coast Water District (District) requirements promote efficient water use through landscape design and irrigation management appropriate to the local climate.

700.2 APPLICABILITY

After December 1, 2015, at a minimum, and in addition to particulars outlined in these design criteria as Additional Conditions and Submittals, all landscape plans submitted to the District for plan review procedures must conform to the latest, revised California State Model Water Efficient Landscape Ordinance: California Code of Regulations, Title 23. Waters, Division 2. Department of Water Resources, Chapter 2.7.

There are often other applicable regulations of the local jurisdictions that may apply to particular projects. The more restrictive criteria of all regulatory agencies shall apply. One local agency may designate another agency, such as a city or special district, to implement some or all of the design standards contained in this document. It is important that applicants meet with all their local regulative authorities to verify compliance with various planning and development standards and ordinances.

700.3 PROCEDURES

Prior to construction, the project applicant shall:

1) Submit payment to the District for plan check procedures.
2) Submit three (3) complete copies of the Landscape Documentation Package to the District for; plan check procedures, the development of comments, and if required, a listing of requested revisions. The Landscape Documentation Package will to be reviewed as many times as needed until the District requirements and standards are satisfied.
3) Receive the District's authorization to construct and record the date of the District authorization in the Certificate of Completion.
4) Submit a copy of the District approved Landscape Documentation Package to the planning department of the local jurisdiction to facilitate issuance of a permit to construct.
5) Submit a copy of the District approved Landscape Documentation Package to the property owner or his/her designee.

Prior to construction, the District shall:

1) Provide the project applicant with an outline of the District's procedures for project authorization.
2) Refer the project applicant to the California State Model Water Efficient Landscape Ordinance and to the District's Engineering Procedures, Guidelines, and Design Requirements.
3) Provide a receipt for payment of fees, deposits, and charges.
4) Review the submitted Landscape Documentation Package, develop comments, and if required, request revisions to the documents submitted by the project applicant.
5) Approve or deny the Landscape Documentation Package; and

6) Upon approval, provide District authorization to construct.

After completion of the landscape project installation, the applicant shall:

1) Have an irrigation audit performed immediately following the completion of construction or rehabilitation and prior to submission of the Certificate of Completion to the District. The irrigation audit report shall be submitted to the District for acceptance.

2) Submit all elements of a Certificate of Completion and a set of record drawings (as-built drawings) to the District for acceptance. If the submitted documents are denied, the District shall provide information to the project applicant regarding reapplication, appeal or other assistance.

After all requested documentation is received and compliance with the standards is verified, the District shall:

1) Provide a signed copy of the Certificate of Completion to the applicant.
2) Keep a record of the documentation for water use evaluation.
3) Administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

700.4 PENALTIES

The District may establish penalties, including the termination of dedicated landscape water service, for noncompliance with these standards.

700.5 REQUIRED DESIGN ELEMENTS FOR IRRIGATION SYSTEMS USING RECYCLED WATER.

Local agencies, during development review, shall determine the extent to which developments shall use recycled water for landscape irrigation. As set forth in the District Water Code, where recycled water is not immediately available for use when the design area is ready for construction, and if the District or local jurisdiction has determined that recycled water will be supplied in the future, the on-site facilities shall be designated to use recycled water. The irrigation system shall be designed and constructed to meet all the District's Standards and Specifications. Provisions shall be made as directed by the District and specifications followed to prepare and allow for connection to the recycled water facilities when they become available.

1) The installation of recycled water irrigation systems (dual distribution systems) shall be required to allow for the current and future use of recycled water, unless a written exemption has been granted by the District.

2) Irrigation systems shall make use of recycled water unless a written exemption has been granted by the District, stating that recycled water meeting all health standards is not available and will not be available in the foreseeable future.

3) The recycled water irrigation systems shall be designed and operated in accordance with all local and state rules and regulations.

In preparation for the conversion to recycled water, and as referred to below, an On-Site Recycled Water

User Plan shall be prepared by the applicant, owner, developer, or customer and submitted to the District. Required elements of this document are outlined in Appendix 19.

700.6 TEMPORARY IRRIGATION SYSTEM DESIGN

Before design submittals, the developer shall obtain approval from the District for any temporary irrigation system designs.

Please refer to Section 600 of the District's Procedures, Guidelines, and Design Requirements for the specific use of recycled water in temporary irrigation systems.

700.7 WATER METERS FOR IRRIGATION

Points of connection to the water distribution system and meter locations shall be approved by the District. Consideration shall be given to the likelihood that if not already provided, recycled water may become available, and appropriate irrigation system points of connection may change. Provisions shall be made, as directed by the District and these specifications, to design the irrigation system in a manner that allows for connection to the recycled water facilities as these facilities become available. Meters shall be located at the property boundary or in the public utility easement.

All landscape irrigation use, excluding that used around single-family dwellings with landscape area less than 5000 square feet, shall have dedicated landscape water meters provided by the District.

700.8 SUBMITTALS TO THE DISTRICT

The applicant shall submit the following items for review and approval by the District. These submittals and their content shall be consistent with the most current State Model Water Efficient Landscape Ordinance promoting water conservation in landscape projects. Some examples of the elements below, and support documents can be found at the District website, http://www.mcwd.org/engineering_docs.php.

The Submittals to the District shall include the following Elements of the Landscape Documentation Package:

1) Project Information

2) Water Efficient Landscape Worksheet

3) Soil Management Report

4) Landscape Design Plan

5) Irrigation Design Plan

6) Elements of the Certificate of Completion

700.9 ADDITIONAL CONDITIONS AND SUBMITTALS

The Submittals to the District shall also conform to and include the following conditions and support documentation requested by the District:

1) Appendix 31 Landscape Site Data Table & Summary of Water Consumption

2) Draft On-Site Recycled Water User Plan (not required of stand-alone single-family residential projects or those projects with granted exemption from the use of recycled water or this specific submittal)

    a) Refer to Section 600.4.12 for details on this requirement. An example of an On-site Recycled Water Users Plan is shown in Appendix 19.

END OF SECTION

APPENDIX 1

RESIDENTIAL CONNECTION FORM
AND
PERMIT APPLICATION

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131
RESIDENTIAL CONNECTION FORM AND PERMIT APPLICATION

NOTE: When approved and signed by the jurisdiction, this form must be submitted with final and complete construction plans to the Marina Coast Water District permit office.

Completing the Residential Connection Form & Permit Application does not guarantee issuance of a permit.
ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

Property Owner: _____
Owner's Telephone Number: _____
Agent/Representative: _____
Agent's Telephone Number: _____
Property Address: _____
Mailing Address (if different from property): _____
Assessor's Parcel Number _____
Project Type (Check One) _____ Single Family Residence, New Construction
_____ SF Residence, Addition/Rennovation
_____ Multi-Family Residence, New Construction
_____ MF Residence, Addition/Rennovation
Water Meters Required (enter quantity): _____ Potable _____ Irrigation

Will landscaping be equal to or greater than 5000 sq.ft.? If so, please fill out and include "Residential Irrigation Connection Form and Permit Application" in submittal package _____Yes _____No _____N/A

NEW CONSTRUCTION SKIP TO TABLE 2.

TABLE NO. 1 - EXISTING PROPERTY FIXTURE COUNT (All fixtures before project.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0		
Bathtub, Standard (may have shower head above)		4.0	2.0		
Bidet		1.0	1.0		
Clothes Washer		4.0	3.0		
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5		
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0		
Dishwasher		1.5	2.0		
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5		
Shower (each additional showerhead)		2.0	1.0		
Shower, separate stall (one head)		2.0	2.0		
Sink, Bar		1.0	1.0		
Sink, Kitchen		1.5	2.0		
Sink, Laundry		1.5	2.0		
Sink, Wash basin/Lavatory (dual bath count as 1)		1.0	1.0		
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0		
Water Closet, ULF (1.6 gal per flush)		2.5	3.0		
Water Closet, HET (1.28 gpf single or dual flush)		1.5	2.0		
Other (specify)					
Other (specify)					
Other (specify)					
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0		
Hose Bibbs (1st Hose Bibb)		2.5	0		
Hose Bibbs (each additional)		1.0	0		
Lawn Sprinklers (each head)		1.0	0		
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0		
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0		

Total Existing Water Fixture Units _____
Total Existing Sewer Fixture Units _____
Existing Equivalent Dwelling Units (Water) _____
Existing Equivalent Dwelling Units (Sewer) _____

TABLE NO. 2 - POST-PROJECT PROPERTY FIXTURE COUNT (All fixtures after project completion.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0		
Bathtub, Standard (may have shower head above)		4.0	2.0		
Bidet		1.0	1.0		
Clothes Washer		4.0	3.0		
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5		
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0		
Dishwasher		1.5	2.0		
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5		
Shower (each additional showerhead)		2.0	1.0		
Shower, separate stall (one head)		2.0	2.0		
Sink, Bar		1.0	1.0		
Sink, Kitchen		1.5	2.0		
Sink, Laundry		1.5	2.0		
Sink, Wash basin/Lavatory (dual bath count as 1)		1.0	1.0		
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0		
Water Closet, ULF (1.6 gal per flush)		2.5	3.0		
Water Closet, HET (1.28 gpf single or dual flush)		1.5	2.0		
Other (specify)					
Other (specify)					
Other (specify)					
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0		
Hose Bibbs (1st Hose Bibb)		2.5	0		
Hose Bibbs (each additional)		1.0	0		
Lawn Sprinklers (each head)		1.0	0		
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0		
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0		

Proposed Total Water Fixture Units			
Proposed Total Sewer Fixture Units			
Proposed Equivalent Dwelling Units (Water)			
Proposed Equivalent Dwelling Units (Sewer)			

1. In completing the Residential Connection Form and Permit Application, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures. If the fixture unit count changes without notification to the District, or if a difference in fixtures is documented upon official inspection, water permits for the property may be cancelled. In addition, water fixtures installed without a water permit may be cause for interruptions of the water service to the site, additional fees and penalties the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

2.In completing the Residentail Connection Form and Permit Application, the undersigned acknowledges that MCWD Code 6.08.040, Paragraph D states “If connection is not made to the District’s water or recycled water system within one year from the date a capacity charge is paid after the effective date of this provision (August 8, 2007), the difference between the amount of the capacity charge paid and the amount of the revised capacity charge in effect at the time of the connection shall be paid to the District before the connection is installed”.

3.In completing the Residentail Connection Form and Permit Application, the undersigned acknowledges that MCWD Code 6.12.020, Paragraph D states “If connection is not made to the District’s sewer system within one year from the date a capacity charge is paid after the effective date of this provision (August 8, 2007), the difference between the amount of the capacity charge paid and the amount of the revised capacity charge in effect at the time of the connection shall be paid to the District before the connection is installed”.

I certify, under the penalty of perjury, that the information provided on the Water Release Form & Permit application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this property

Signature of Owner/Agent Date

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received: _____ By: _____

Meter Installation Approval Date: _____ By: _____
District Engineer

Water Equivalent Dwelling Units (EDU):	If reducing EDU count, no charge	**:Sewer Equivalent Dwelling Units (EDU)**
Proposed Total Dwelling Units:		:Proposed Total Dwelling Units
Existing Dwelling Units:		:Existing Dwelling Units
Net Increase in Dwelling Units:		:Net Increase in Dwelling Units
Net Water EDU's Due:		*:Net Sewer EDU's Due*

Water Meter Size: [ ]

Fees and Capacity Charges Calculations: **Svc Area:** [ ]

Fees	**Fee Schedule**	**No. Units**	**Extension**	
Preliminary Project Review Fee, New Residence	$ 500.00		$	
Preliminary Review Fee, Addition/Rennovation	$ 200.00		$	
Additional Review Fees (actual cost)	$		$	
Water Permit Fee	$ 30.00		$	
Sewer Permit Fee	$ 30.00		$	
Water Meter Installation Fee:	$		$	
Water Capacity Charge (see EDU calcs below):	$		$	
Sewer Capacity Charge (see EDU calcs below):	$		$	
Construction Inspection (single lot):	$ 400.00		$	
Construction Inspection (large project):	$ 500.00		$	*
Total				

Additional Review Fees:

Reviewer:	Hours:	Rate:	Subtotal:
District Engineer		$ 105.00	$
Capital Projects Manager		$ 85.00	$
Project Engineer		$ 68.00	$
Associate Engineer		$ 63.00	$
Consultants			$
Total			$

* Fee estimate not final until reviewed by MCWD staff.

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131

RESIDENTIAL IRRIGATION CONNECTION FORM AND PERMIT APPLICATION

NOTE: When approved and signed by the jurisdiction, this form must be submitted with final and complete construction plans to the Marina Coast Water District permit office.

Completing the Residential Irrigation Connection Form & Permit Application does not guarantee issuance of a permit.

ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

PROPERTY INFORMATION

Property Owner: _____
Owner's Telephone Number: _____
Agent/Representative: _____
Agent's Telephone Number: _____
Property Address: _____
Mailing Address (if different from property): _____
Assessor's Parcel Number: _____
Rehabilitated Landscape requiring a permit? (Y/N) _____

DESCRIPTION OF AREA SERVED

Development Name (Address): _____
Irrigation Meters Required (enter quantity): _____
List of Parcels/Lots Served By Meter(s): _____
_____
_____
_____
Map of area served attached? (Y/N) _____ (map must identify the Parcels/Lots served by the Connection)

ACREAGES OF AREA SERVED (1-acre = 43,560-feet-squared)

	Proposed		Existing	
	Acres	Ft^2	Acres	Ft^2
Total Project Area:				
Area of Structures, Hardscape:				
Area of Non-irrigated Open Space:				
Landscape Area (irrigated planting area):				
A) Landscape Plantings (non-turf):				
B) Ornamental Turf:				
C) Special Landscape Area (recreational turf):				

CONVERTING ACREAGES TO EQUIVALENT DWELLING UNITS

Acreage Change Summary

Irrigated Landscape Category	**Proposed (acres)**	**Existing (acres)**	**Change (acres)**
Landscape (non-turf)			
Ornamental Turf			
Special Landscape Area (recreational turf)			

Acreage to Demand (in acre-feet per year - AFY)

Irrigated Landscape Category	**Change (acres)**	**Water Use (AFY)**
Landscape (non-turf)		
Ornamental Turf		
Special Landscape Area (recreational turf)		

Demand to Equivalent Dwelling Units (EDUs)

Irrigated Landscape Category	Water Use (AFY)	EDUs
Landscape (non-turf)		
Ornamental Turf		
Special Landscape Area (recreational turf)		

1. In completing the Residentail Irrigation Connection Form and Permit Application, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures and irrigation areas. If the fixture unit count, irrigation areas, or or business type changes without notification to the District, or if a difference in fixtures, irrigatio areas, or business type is documented upon official inspection, water permits for the property may be cancelled. In addition, if water fixtures or irriagtion systems are installed or a change of business type occurs without a water permit, then this may be cause for interruptions of the water service to the site, additional fees and penalties, the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

2.In completing the Residentail Irrigation Connection Form and Permit Application, the undersigned acknowledges that MCWD Code 6.08.040, Paragraph D states "If connection is not made to the District's water or recycled water system within one year from the date a capacity charge is paid after the effective date of this provision (August 8, 2007), the difference between the amount of the capacity charge paid and the amount of the revised capacity charge in effect at the time of the connection shall be paid to the District before the connection is installed".

3. Upon installation of the water meter, the undersigned acknowledges that a Back Flow Preventer Assembly (BFP) Test shall be conducted by a Certified BFP Assembly Tester within two weeks of meter installation. Failure to do so within the time frame and/or failed test results may result in removal or lockout of the meter.

I certify, under the penalty of perjury, that the information provided on the Residentail Irrigation Connection Form and Permit Application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this property.

Signature of Owner/Agent _____ Date _____

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received: _____ By: _____

Meter Installation Approval Date: _____ By: _____
District Engineer

Exterior Water Equivalent Dwelling Units (EDU):

Proposed Total Water Demand:		AFY
Existing Water Demand:		AFY
Net Increase in Demand:		AFY
Exterior Water EDUs:		EDUs @ 0.33 AFY/EDU
Previous EDUs Paid:	_____	EDUs
Net EDU's Due:		

Irrigtion Water Meter Size: ☐

Fees and Capacity Charges Calculations **Svc Area:** ☐

Fees	Fee Schedule	No. Units	Extension
Preliminary Project Review Fee, New Construction	$ 500.00		$
Preliminary Review Fee, Comm. Modifications	$ 400.00		$
Additional Review Fees (actual cost)	$		$
Irrigation Meter Installation Fee:	$		$
Exterior Water Capacity Charge (see EDU calcs):	$		$
Construction Inspection (single lot):	$ 400.00		$
Construction Inspection (large project):	$ 500.00		$
Total			$ *

* Fee estimate not final until reviewed by MCWD staff.

	Size:	Quantity:	Size:	Quantity:
Backflow Devices:				
Irrigation:				

Additional Review Fees:

Reviewer: Hours:	Rate:	Subtotal:
District Engineer	$ 105.00	$ -
Capital Projects Manager	$ 85.00	$ -
Project Engineer	$ 68.00	$ -
Associate Engineer	$ 63.00	$ -
Consultant		$ -
Total		$ -

APPENDIX 2

COMMERCIAL CONNECTION FORM
AND
PERMIT APPLICATION

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131
COMMERCIAL CONNECTION FORM AND PERMIT APPLICATION

Completing the Commercial Connection Form & Permit Application does not guarantee issuance of a permit.
ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

1. OWNERSHIP INFORMATION

Property Owner: _____
Owner's Telephone Number: _____
Mailing Address: _____

2. AGENT/REPRESENTATIVE INFORMATION _____
Agent/Representative: _____
Agent's Telephone Number: _____
Mailing Address: _____

3. PROPERTY INFORMATION _____
Property Address: _____
_____
Assessor's Parcel Number _____
Project Type (Check One) _____ New Construction
_____ Rennovation of Existing Structures
_____ Rehabilitated Landscape (2,500 Sq. Ft. or more)
_____ New business in existing building, no rennovation
Water Meters Required (enter quantity): _____ Potable _____ Irrigation

4. BUSINESS INFORMATION (used to calculate capacity charges)

Item	Proposed		Previous		Change
List Business Type			For new const, leave blank		
No. of Employees					
Auto repair shops		sq. ft.		sq. ft.	
Bar		seats		seats	
Beauty shop/barber shop		stations		stations	
Car wash w/recycle		sq. ft.		sq. ft.	
Child Care		sq. ft.		sq. ft.	
Commercial laundry		washers		washers	
Delicatessen (w/o seating)		sq. ft.		sq. ft.	
Dental offices		sq. ft.		sq. ft.	
Dry Cleaners (no washer machines)		sq. ft.		sq. ft.	
Gas station		pumps		pumps	
General retail		sq. ft.		sq. ft.	
General office		sq. ft.		sq. ft.	
Grocery and other Markets		sq. ft.		sq. ft.	
Hotel/motel/bed & breakfast		units		units	
Laundromat (self-serve)		washers		washers	
Medical offices		sq. ft.		sq. ft.	
Meeting halls, churches		sq. ft.		sq. ft.	
Nursing home		rooms		rooms	
Photographic lab		sq. ft.		sq. ft.	
Plant nursery		sq. ft. land		sq. ft. land	
Public restroom		toilets		toilets	
Restaurant (incl. fast food, deli, sandwich shop)		seats		seats	
Retail photo w/processing		sq. ft.		sq. ft.	
Swimming pool (per 100 sq. ft. pool surface area)		100 sf		100 sf	
Theater		seats		seats	
Veterinary		sq. ft.		sq. ft.	
Warehouse, distribution, self-storage		sq. ft.		sq. ft.	

continued on next page

4. BUSINESS INFORMATION (continued)

Exterior Irrigation

Item	Proposed		Previous		Change
Landscape (non-turf)		sq. ft.		sq. ft.	
Ornamental Turf		sq. ft.		sq. ft.	
Special Landscape Area (recreational turf)		sq. ft.		sq. ft.	

NEW CONSTRUCTION SKIP TO TABLE 2.

TABLE NO. 1 - EXISTING PROPERTY FIXTURE COUNT (All fixtures before project.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Standard (may have shower head above)		4.0	2.0		
Clothes Washer		4.0	3.0		
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5		
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0		
Dishwasher		1.5	2.0		
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5		
Drinking Fountain / Water Cooler		0.5	0.5		
Floor Drain		0.0	3.0		
Shower (each additional showerhead)		2.0	1.0		
Shower, separate stall (one head)		2.0	2.0		
Sink, Bar		2.0	2.0		
Sink, Commercial sink (Service/Mop)		3.0	3.0		
Sink, Kitchen		1.5	2.0		
Sink, Laundry		1.5	2.0		
Sink, Wash basin/Lavatory		1.0	1.0		
Urinal, flushometer (1.0 gal per flush)		2.0	2.0		
Urinal, waterless		0.0	0.5		
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		5.5	6.0		
Water Closet, ULF (1.6 gal per flush)		2.5	4.0		
Water Closet, HET (1.28 gpf single or dual flush)		1.5	3.0		
Other (specify)					
Other (specify)					
Other (specify)					
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0		
Drinking Fountain		0.5	0		
Hose Bibbs (1st Hose Bibb)		2.5	0		
Hose Bibbs (each additional)		1.0	0		
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0		
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0		

Total Existing Water Fixture Units _____

Total Existing Sewer Fixture Units _____

TABLE NO. 2 - POST-PROJECT PROPERTY FIXTURE COUNT (All fixtures after project completion.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Standard (may have shower head above)		4.0	2.0		
Clothes Washer		4.0	3.0		
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5		
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0		
Dishwasher		1.5	2.0		
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5		
Drinking Fountain / Water Cooler		0.5	0.5		
Floor Drain		0.0	3.0		
Shower (each additional showerhead)		2.0	1.0		
Shower, separate stall (one head)		2.0	2.0		
Sink, Bar		2.0	2.0		
Sink, Commercial sink (Service/Mop)		3.0	3.0		
Sink, Kitchen		1.5	2.0		
Sink, Laundry		1.5	2.0		
Sink, Wash basin/Lavatory		1.0	1.0		
Urinal, flushometer (1.0 gal per flush)		2.0	2.0		
Urinal, waterless		0.0	0.5		
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		5.5	6.0		
Water Closet, ULF (1.6 gal per flush)		2.5	4.0		
Water Closet, HET (1.28 gpf single or dual flush)		1.5	3.0		
Other (specify)					
Other (specify)					
Other (specify)					
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0		
Drinking Fountain		0.5	0		
Hose Bibbs (1st Hose Bibb)		2.5	0		
Hose Bibbs (each additional)		1.0	0		
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0		
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0		

Proposed Total Water Fixture Units _____

Proposed Total Sewer Fixture Units _____

1.In completing the Commercial Connection Form and Permit Application, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures. If the fixture unit count changes or business type changes without notification to the District, or if a difference in fixtures or business type is documented upon official inspection, water permits for the property may be cancelled. In addition, if water fixtures are installed or a change of business type occurs without a water permit, then this may be cause for interruptions of the water service to the site, additional fees and penalties, the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

2.In completing the Commercial Connection Form and Permit Application, the undersigned acknowledges that MCWD Code 6.08.040, Paragraph D states “If connection is not made to the District’s water or recycled water system within one year from the date a capacity charge is paid after the effective date of this provision (August 8, 2007), the difference between the amount of the capacity charge paid and the amount of the revised capacity charge in effect at the time of the connection shall be paid to the District before the connection is installed”.

3.In completing the Commercial Connection Form and Permit Application, the undersigned acknowledges that MCWD Code 6.12.020, Paragraph D states “If connection is not made to the District’s sewer system within one year from the date a capacity charge is paid after the effective date of this provision (August 8, 2007), the difference between the amount of the capacity charge paid and the amount of the revised capacity charge in effect at the time of the connection shall be paid to the District before the connection is installed”.

4. Upon installation of the water meter, the undersigned acknowledges that a Back Flow Preventer Assembly (BFP) Test shall be conducted by a Certified BFP Assembly Tester within two weeks of meter installation. Failure to do so within the time frame and/or failed test results may result in removal or lockout of the meter.

I certify, under the penalty of perjury, that the information provided on the Commercial Connection Form and Permit Application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this property.

Signature of Owner/Agent _____ Date _____

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received: _____ By: _____

Fees and Capacity Charges Calculations **Svc Area:**

Fees	**Fee Schedule**	**No. Units**	**Extension**	
Preliminary Project Review Fee, New Construction	$ 500.00		$	
Preliminary Review Fee, Comm. Modifications	$ 400.00		$	
Additional Review Fees (actual cost)	$		$	
Water Permit Fee	$ 30.00		$	
Sewer Permit Fee	$ 30.00		$	
Potable Water Meter Installation Fee:	$		$	
Irrigation Meter Installation Fee:	$		$	
Interior Water Capacity Charge (see EDU calcs):	$		$	
Exterior Water Capacity Charge (see EDU calcs):	$		$	
Sewer Capacity Charge (see EDU calcs below):	$		$	
Construction Inspection (single lot):	$ 400.00		$	
Construction Inspection (large project):	$ 500.00		$	
Total			$	*

Interior Water Equivalent Dwelling Units (EDU):

Proposed Total Water Demand:		AFY
Existing Water Demand:		AFY
Net Increase in Demand:		AFY
Water EDUs @ 0.33 AFY per EDU:		
Previous EDUs Paid:		
Net EDU's Due:		

Exterior Water Equivalent Dwelling Units (EDU):

Proposed Total Water Demand:		AFY
Existing Water Demand:		AFY
Net Increase in Demand:		AFY
Water EDUs @ 0.33 AFY per EDU:		
Previous EDUs Paid:		
Net EDU's Due:		

Sewer Equivalent Dwelling Units (EDU):

Proposed Total Sewer Fixture Units:		
Existing Sewer Fixture Units:		
Net Increase in Fixture Units:		
Sewer EDUs @ 20 FU per EDU (min 1):		Hotel/motel use 1 EDU/room
Previous EDUs Paid:		
Net EDU's Due:		

Potable Water Meter Size:

Irrigtion Water Meter Size:

	Size:	Quantity:	Size:	Quantity:
Backflow Devices:				
Potable:				
Irrigation:				

Additional Review Fees:

Reviewer:	Hours:	Rate:	Subtotal:
District Engineer		$ 105.00	$ -
Capital Projects Manager		$ 85.00	$ -
Project Engineer		$ 68.00	$ -
Associate Engineer		$ 63.00	$ -
Consultant			$ -
Total			$ -

* Fee estimate not final until reviewed by MCWD staff.

EXAMPLE

APPENDIX 3

Construction and Transfer of Water, Sewer and Recycled Water Infrastructure Agreement

EXAMPLE

CONSTRUCTION AND TRANSFER OF WATER, SEWER AND RECYCLED WATER INFRASTRUCTURE AGREEMENT BETWEEN MARINA COAST WATER DISTRICT AND DEVELOPER

TABLE OF CONTENTS

Exhibits

EXAMPLE

CONSTRUCTION AND TRANSFER OF WATER, SEWER AND RECYCLED WATER INFRASTRUCTURE AGREEMENT

This Agreement made and entered into this _____, by and between **Marina Coast Water District**, 11 Reservation Road, Marina, CA, 93933, hereinafter called "District", and **_____,** a California limited partnership, with its principal offices at _____, hereinafter called the "Developer." This Agreement pertains to the construction and transfer of water, sewer and recycled water infrastructure. [Note: replace City with County throughout, if applicable.]

1. Recitals

1.1 The Developer owns and is developing an approximately ___ acre parcel of land, to be developed [in phases] on property described in Exhibit "B" attached hereto and made a part hereof, in the [City of _____][County of Monterey], California, ("City" or "County") all hereafter referred to as the "Development".

1.2 The City has approved an allocation of water and sewer capacity for the entire _____ Development. The total water allocated by the City to _____ is xxx AFY. However, neither the City nor the District may approve: (1) water allocations that exceed the allocations set by the Fort Ord Reuse Authority (FORA), or (2) sewer capacity established by the type and density of development as included in the FORA Consistency Determinations The District's role in the Development is to approve the plans for, and inspect the construction of the water sewer, and recycled water "facilities", (defined to mean those certain infrastructure improvements provided for in this Agreement and as approved by District as part of its review of Development plans), accept the transfer of the title, to maintain and operate the systems, and to bill customers for water and sewer service at rates set for the District's Ord Service Area from time to time.

1.3. The District will only serve the Development if the Developer delivers to the District a certified copy of the resolution from the City attached to this Agreement as Exhibit A, approving the allocation of water for the Development from water allocated to the City by FORA.

1.4 Term. This Agreement commences upon execution by the parties and continues for two years (twenty-four months) or until completion of the development construction and the associated warranty period, whichever comes first, unless terminated earlier as provided in section 17 of this Agreement.

2. Design and Construction Requirements

2.1 The water, sewer, and recycled water facilities shall be designed, constructed and be operable to the District's requirements, which shall be a condition of the District's acceptance of the system facilities under this Agreement. District's requirements include, but are not limited to the following:

2.1.1 Developer shall design and construct the water, sewer and recycled water system facilities in accordance with the District's most recent *Standard Plans and Specifications for Construction of Domestic Water, Sewer, and Recycled Water Facilities* (hereafter *Standards*), Construction Inspection Manual and any other applicable State Regulatory Agency requirements, whichever are most stringent. Any conflict in Development requirements shall be worked out during the plan review process. A licensed civil engineer registered in the State of California shall prepare all plans and specifications.

2.1.2 The Developer shall comply with the District's most recent *Procedure Guidelines and Design Requirements* (hereafter *Procedures*) and the District's *Standards* when submitting project plans and specifications to the District for review and consideration of approval. District's review shall commence after determining compliance with District's *Procedures* regarding the submittals and any other applicable State Regulatory Agency requirements, whichever are most stringent. District review of the project plans and specifications shall commence after receipt of the initial deposit (see Paragraph 2.1.7). District may approve plans concurrent with the City's Approval.

2.1.3 The Developer shall comply with most recent District Code including, but not limited to, section 4.28 *Recycled Water*. More specifically, section 4.28.010 *Applicability* states that "[T]his chapter applies to publicly owned properties, to commercial, industrial and business properties, and to other such properties as may be specified from time to time by Marina Coast Water District … "Section 4.28 does not require the use of recycled water for irrigation to privately owned residential lots. Improvement plans for the Development must contain recycled water lines to serve common areas and other non-residential lot irrigation within the Development. The Developer and the District will cooperatively identify recycled water turnout location(s). The Developer will also install the lateral lines from each turnout. The Developer, or its successors or assignees (such as an owners association) will obtain required permits for recycled water. This shall include, complying with the California Department of Health Services and other regulatory agency requirements prior to constructing any recycled water facilities.

2.1.4 The District will inspect the construction of water, sewer and recycled water facilities and verify that construction conforms to project plans and specifications. District responsibilities for inspection extends to five (5) feet from the building exterior at the point where the utility enters the structure. The District will also inspect special fixtures including, zero water use urinals, hot water recirculation systems, etc. The District will inform the Developer of required field changes and will contact the Developer and the City regarding easements outside publicly dedicated rights of way. The District will enter into a franchise agreement with the City for non-exclusive use within the public rights of way. Upon receipt of recorded private easements to serve the Development in accordance with the plans and specifications approved by the District, the District will quitclaim any easements not required to serve the Development and not required by the District.

2.1.5 The Developer shall be responsible for replacing or repairing any existing water and sewer facilities within its project limits in order for the District to maintain service to its customers as further described in paragraph 3 *Existing Water and Sewer Infrastructure* of

this Agreement, and the *In-Tract Policy*. This obligation is Limited to the period of Developer's construction of the infrastructure and the Warranty period of such work and in accordance with the District's most recent *In-Tract* Policy

2.1.6 All system facilities shall be tested to meet District requirements. No system facilities or portion thereof, including but not limited to pipes, pumps, electrical and instrumentation and control will be accepted without meeting District test requirements. The District shall have the right to inspect work in progress in the construction of either in-tract or out-of-tract water, recycled water and sewer infrastructure facilities or special fixtures, as describe above.

2.1.7 Plan Review Fees. The Developer, on a phased basis, agrees to pay all fees and charges, including additional plan check fees and construction inspection fees as required by the District for Developer's work. These fees will be assessed when the fee is paid. The District may also require a prepaid fee to cover staff time before preliminary level or concept level plan check begins. (See *Procedures* section 100.6.2) If the District Engineer determines consultant assistance is required for plan check review or portion thereof, the Developer agrees to prepay the additional plan check fees if that cost exceeds the balance on the initial deposit. The District shall obtain the Developer's written approval for any costs in excess of this amount, for which approval shall not be unreasonably withheld. Upon the execution of this Agreement by both parties, the Developer shall deposit with the District the applicable administration and plan check fees. Any surplus fees shall be returned to the Developer, or at Developer's request, used to pay subsequent fees, e.g., construction inspection fees.

2.1.8 Construction Inspection Fees. On a phased basis, the District shall require the construction inspection fee before undertaking a construction inspection review of the proposed water, recycled water and sewer facilities. As a condition precedent to the District's obligation to undertake a construction inspection review of the proposed water, recycled water and sewer facilities, the Developer shall provide to the District the construction inspection fee, which is currently five hundred dollars ($500.00) per unit plus three percent (3%) of water, recycled water and sewer facilities construction costs, pursuant to Developer's Engineer's estimate. (See *Procedures* section 200.3.2) Any surplus inspection fees shall be returned to Developer.

2.1.9 Construction Bid Data. The Developer will submit actual construction bid data. The submitted data shall be in a unit cost format certified by both the contractor and the Developer as being the actual costs incurred in furnishing and installing the water, sewer and recycled facilities. The water, sewer and recycled construction costs must be reviewed and accepted by the District. The District shall maintain all such information as confidential and shall not disclose the same to any third party.

3 Existing Water and Sewer Infrastructure

3.1 The Developer will comply with the District's *In-Tract Policy* regarding any water, reclaimed water and sewer mains or appurtenances within the Development. Developer, or its successors or assignees, shall assume all responsibility, and will hold District harmless, for all

water/sewer infrastructure within the Development boundaries that will be removed or abandoned by Developer. Abandonment-in-place requires written approval by the District. The Developer is responsible to repair or replace water and sewer facilities within the Development boundaries during the construction of the Development which are for the exclusive use of the Development.

3.2 For Developments that use existing infrastructure as described in the *In-Tract Policy* (reference Policy no. 2), the Developer shall provide a completed, signed Utility Agreement with the District that provides anticipated higher costs of the remaining older system left in-place. The Utility Agreement shall include detailed language regarding form of payment and date certain for receipt of payment. Acceptable forms of payment include payment bond, irrevocable letter of credit, cash deposit, or construction "set-aside" loan. Developments that do not use existing infrastructure as described in the *In-Tract Policy* will follow Policy no. 1 of that document. Developer does not anticipate use of any existing infrastructure, therefore, this paragraph would not apply. However, should that change, as design progresses, the requirements of this paragraph shall be enforced as described in the *In-Tract Policy,* Developer will follow Policy no.1 of that document.

3.3 As part of District's review, District may require Developer to design and construct over-sized infrastructure to accommodate water, recycled water and sewer service to areas other than the Development. The District or a third party will pay expenses relating to any installation or replacement of facilities needed for any third party users. Receipt of such payments may not delay District approvals. Any such obligation may be satisfied by a reimbursement agreement or other agreement reasonably satisfactory to Developer. Other than pipeline or related appurtenances that are repaired or replaced by the Developer, if the Developer repairs or replaces facilities that benefit properties other than the Development, the District may provide a portion of the replacement costs through a cost sharing Agreement or other Agreement acceptable to the District and the Developer, or in accordance with the then-current District payment structure required of all new developments, or as determined pursuant to the dispute resolution procedure in paragraph 19 *Dispute Resolution Procedures* if the parties cannot agree.

4. District to Serve Development

4.1 , District will provide water, recycled water and sewer service to the Development as shown on Exhibit C after final Board Acceptance of the conveyance of the water, recycled water, and sewer system facilities and final Board Acceptance of the system (see *Procedures* section 300.25). The District will bill and serve them. The bill will include the prepayment of applicable meter fees and charges, cross connection charges, and other applicable fees and charges approved pursuant to the agreement with FORA for service on the former Fort Ord. Once the applicable fees and charges are made, the District will immediately begin service with the installation of the water meter(s). The District's obligations in this section are subject to District's rules, regulations, policies and ordinances, which may be updated from time to time.

5. Capacity Charge

5.1 In July 2005, the District Board of Directors approved a capacity charge for water and sewer

services in the amount of $2,800 per EDU and $1,000 per EDU respectively. These charges are due when the first building permit is issued. The District Board of Directors reserves its right to review and revise these charges from time to time; subject to applicable law and the District's approval procedures for such charges.

5.2 Exhibit E is a notice that will be provided to the property owners informing them of the need for and amount of water and sewer surcharge that will be included on their District customer bills. The Developer hereby agrees that the Notice to Buyer(s) informing them of the Water and Sewer surcharge adopted by the District shall either be contained in the Department of Real Estate Public Report or a letter from the Developer to each prospective property buyer. The Developer agrees to provide this notice to each prospective property buyer prior to the execution of any contract to purchase property in the Development.

6. Water Augmentation Project [applicable only to the Ord Community]

6.1 In October 2004, the District Board of Directors certified its Regional Urban Water Augmentation Project Environmental Impact Report for a Water Augmentation Project. That project will provide additional water to the former Fort Ord. Alternatives included a 3,000 AFY recycled water project, a 3,000 AFY desalination project, or a 3,000 AFY hybrid project that includes a 1,500 AFY desalination plant and a 1,500 AFY recycled water project. In June 2005, the District and FORA Board of Directors approved the Hybrid Alternative and directed staff to initiate the scoping process. The selection of the Hybrid Alternative will result in the availability of recycled water. Therefore, improvement plans must be compatible with and anticipate the availability of a non-potable water supply to serve common area open spaces within the Development, as permitted by applicable laws and regulations. If an alternative water supply satisfies the foregoing requirements, Developer and District will cooperatively identify recycled water turnout location(s).

6.2 Developer, or its successors or assignees (such as an owners association), will obtain all permits that allow the use of recycled water, and agrees to take recycled water for non-potable use at the time it becomes available. The District shall establish a separate cost for recycled water in the same manner that it establishes the cost of potable water. Developer, or its successors or assignees agree that the District-established cost will be paid by the recycled water customers. .

7. Licensed Contractor

7.1 The Developer, or his authorized representative (contractor) performing the work, shall be licensed under the provisions of the Business and Professions Code of the State of California to do the work called for in the project. District reserves the right to waive this requirement at its discretion where permitted under state statute.

7.2 The Developer, or his contractor, shall be skilled and regularly engaged in the installation of water and sewer systems. The District may request evidence that the constructing party has satisfactorily installed other projects of like magnitude or comparable difficulty. Contractors must furnish evidence of their qualifications to do the work.

8. Permits, Easements, and Related Costs

8.1 Except as otherwise provided in this Agreement, the Developer shall obtain all necessary local, county and state permits (including encroachment permits) and conform to requirements thereof.. Developer shall obtain all easements, for other than public rights of way, necessary for ingress and egress to and from the facilities for the purpose of installation, operation, maintenance and removal of said facilities. Pipeline easements shall be 20 feet in width or as otherwise agreed by the District Engineer and Developer. Easements shall be in a form reasonably approved by the District and shall be submitted/conveyed to the District in recordable form before the District accepts the facilities

9. Final Inspection and Reimbursement of District Costs

9.1 The District's Engineer must inspect completed water, sewer and recycled water system facilities, or portion thereof. The District will not accept the facility until its Engineer has given written approval that it satisfies the District's requirements. Developer shall be responsible for all costs incurred by the District that are associated with interim and final inspection, completion, additional construction, and testing of the system facilities, subject to the limitations set forth in Paragraph 2 *Design and Construction* Requirements. Developer shall reimburse District for costs to correct any damages to facilities related to the construction of the Development. This reimbursement obligation is limited to the warranty period described in paragraph 15 *Warranties*. Developer shall remit to District prior to the conveyance of the water, sewer and recycled water system facilities to the District, payment of reimbursable costs, if any, incurred for inspection, administration and plan review, over and above deposits previously paid to the District. If there is a surplus in such accounts or any refunds due Developer, then District shall return to Developer the amount of such surplus or refunds.

10. Underground Obstructions

10.1 The District is not responsible for Developer's (or Developer's contractor's) acts and omissions during construction. Any location of underground utility lines or surface obstructions given to the Developer or placed on the project drawing by District are for the Developer's convenience, and must be verified by Developer in the field. The District assumes no responsibility for the sufficiency or accuracy of such information, lines, or obstructions.

11. As-Built Plans, Specifications, Values, Etc.

11.1 Developer shall, as a condition of District's acceptance of the water, sewer and recycled water system facilities, provide to the District in accordance with Section 400.13 of the *Procedures*. Developer agrees to supply the following:

11.1.1 A set of mylar drawing prints and AutoCAD digitized files of the improvement plans which show the water, sewer and recycled water system facilities, and a hardcopy and electronic copy of the specifications, and any contract documents used for the construction of the water, sewer and recycled water system facilities. These files may be in Adobe Acrobat format.

11.1.2 A complete, detailed statement of account, the form and content to be provided by the District at the time of conveyance, of the amounts expended for the installation and construction of the system facilities, with values applicable to the various components thereof, together with a list of any other materials and equipment (and their values) being transferred.

11.1.3 Any other documents required by Section 400.13 of the *Procedures*.

12. Indemnity, Insurance, and Sureties

12.1 . Insurance and Liability - The Developer agrees to have its contractor provide the indemnity, defense, and save harmless agreement to the District, its officers, agents, and employees as provided in Exhibit D, attached hereto and hereby incorporated by reference. Insurance policies shall provide that such insurance is primary insurance. Coverages described in Exhibit D shall be maintained through the term of this Agreement, and the Developer's contractor shall file with the District prior to the execution of this Agreement, and as policy renewals occur, a Certificate of Insurance evidencing that the insurance coverages required herein have been obtained and are currently in effect.

12.2. Performance and Payment Surety - Developer or its authorized representative to do the work (contractor) shall furnish the District with a surety in the amount of the District's estimate of the project construction cost to secure the completion of and payment for the work. The surety shall be in a form satisfactory to the District such as a performance and payment bond, irrevocable letter of credit, cash deposit, or construction "set-aside" letter. Such surety may include evidence that it was submitted to another public agency of an equivalent or greater amount covering the work to be done under this Agreement.

12.3. Submittal of Insurance Certificates and Surety - The required insurance certificates shall be delivered prior to commencement of construction and performance, and payment surety shall be delivered to the District prior to District approval of plans and specifications.

13. Transfer of System Facilities to District after Completion

13.1 Developer will execute and obtain all signatures of any other parties having any interest (including any Deed of Trust), and deliver a conveyance satisfactory in form and content to District. This conveyance shall transfer absolute and unencumbered ownership of the completed water, sewer and recycled water system facilities to the District together with all real property, interest in real property, easements and rights-of-ways (including any off-site easements or real property) other than those contained in public rights of way, and all overlying and other underground water rights that are a part of, appurtenant to, or belonging to any parcels now or hereafter served by the water, sewer and recycled water system facilities that are necessary or appropriate in the opinion of the District for the ownership and operation of the system. Provided all other conditions set forth herein are satisfied, the District shall accept the

conveyance. All costs of construction of the system facilities, for which the Developer is responsible, shall have been paid for by Developer, the time for filing mechanics liens shall have expired (or Developer shall provide other security to protect against liens, and the title to the water, sewer and recycled water system facilities and the interests in real property transferred shall be good, clear and marketable title, free and clear of all encumbrances, liens or charges. Developer shall pay costs of title insurance deemed necessary by the District. All construction, including final inspection punch list items must be completed prior to transfer, and the transfer shall not be completed until the conveyance transferring the water, sewer and recycled water system facilities has been formally accepted by the District. After transfer, the District shall own and be free in every respect to operate and manage the water, sewer and recycled water system facilities and to expand or improve, or interconnect with adjacent facilities, as it deems appropriate.

14. Developer Assistance

14.1 Developer shall, both before and after the transfer, secure and provide any information or data reasonably needed by District to take over the ownership, operation and maintenance of the system facilities.

15. Warranties

15.1 Developer hereby warrants that as of the time of the District's acceptance of the conveyance of the water, sewer and recycled system facilities (or when Developer thereafter completes the installation of any works or components subsequently installed, repaired, or replaced) the water, sewer and recycled system facilities and all components thereof, will be in satisfactory working order and quality; and that the water, sewer and recycled systems facilities and all components thereof have been constructed and installed in compliance with specifications and as-built plans being provided to the District, and in accordance with applicable requirements of any governmental agency having jurisdiction. Developer also warrants that as of the time of the District's acceptance of the conveyance of the water, sewer and recycled water system facilities (or when Developer thereafter completes the installation of any works or components subsequently installed, repaired, or replaced) the system facilities will operate in good and sufficient manner for the purpose intended for one (1) year after the date of acceptance (see *Procedures* section 300.24), or 180-days from the date new facilities are subsequently re-installed, repaired, or replaced (hereafter *replacement facilities*), whichever is later and the Developer shall indemnify District for any costs or expenses (including District's own labor costs) incurred by reason of failure, malfunction, replacements, repairs or any other expenses incurred by District during the one (1) year warranty period or 180-days for *replacement facilities,* whichever is later.

15.2 Developer shall furnish the District with a Warranty Bond (or other instrument satisfactory to the District) in the amount of twenty percent (20%) of the actual construction costs to protect the District against any failure of the work due to faulty materials, poor workmanship or defective equipment within a period of one (1) year following the date of acceptance or 180-days for *replacement facilities, whichever is later*.

16. No Water, Recycled Water and Sewer Service Prior to Completion and Transfer

16.1 The Developer shall not allow any occupant or person to commence operations or use of any part of the water, recycled water and sewer system facilities without the express written consent of the District. Such consent may not be unreasonably withheld. District may impose conditions or restrictions upon any consent to such prior service, such as posting a surety bond. District recognizes that the Development, and hence the water, sewer and recycled system facilities, will be built, accepted and transferred in multiple phases. Notwithstanding any of the foregoing, Developer may use the sewer, water and recycled system facilities before they are accepted for fire protection and construction purposes in all phases, subject to satisfaction of applicable testing.

17. Performance

Developer agrees to promptly design and construct the water and sewer and recycled water system and, transfer the same to the District in accordance with the terms of this Agreement. If construction of the water and sewer and recycled water system facilities of the Development has not been completed and accepted by District within twenty four (24) months from the date of execution of this Agreement (such date may be extended for delays beyond Developer's control, but in no event shall such delay exceed twelve (12) additional months), the District shall have the option to terminate this Agreement. If construction on any phase is not completed within twenty four months or as extended as provided above, then an Amendment to this Agreement will be necessary to address each such phase. Subsequent phases also may at District's discretion be addressed by Amendment(s) to this Agreement.

18. Assignment

Neither party may assign their rights or obligations under this Agreement within its term without the written consent of the other party. Rights to water, recycled water and sewer service will be deemed assigned to each property owner upon acquisition of his/her commercial unit in the Development. Upon assignment, the Developer's responsibilities relating to recycled water facilities, use and approvals will become the assignee's responsibility. This provision will cease to have any effect when the District accepts title to the water facilities or the Agreement is terminated.

19. Dispute Resolution Procedure

Disputes arising under this agreement shall be resolved as follows:

19.1. Prevention of Claims/ Meet and confer (3 days)

The parties agree that they share an interest in preventing misunderstandings that could become claims against one another under this agreement. The parties agree to attempt to identify and discuss in advance any areas of potential misunderstanding that could lead to a dispute. If either party identifies an issue of disagreement, the parties agree to engage in a face-to-face discussion of the matter within three calendar days of the initial request. If the dispute cannot be negotiated between the parties, the

matter shall first be brought to the attention of the District's Board of Directors who may seek to intervene in the negotiation or may direct staff to seek arbitration. If the parties are still unable to amicably resolve such disagreements or misunderstandings, they agree to enlist the informal assistance of a third party to help them reach an accord. If any disagreement remains unresolved for ten days, the parties agree to submit it to mediation.

19.2. Mediation (30 days)

Either party may demand, and shall be entitled to, mediation of any dispute arising under this agreement at any time after completing the meet and confer process described in subsection (a). Mediation shall commence not more than ten days after the initial mediation demand and must be concluded not more than thirty (30) days after the date of the first mediation demand. If mediation is not concluded within that time, then either party may demand arbitration.

Mediation shall be submitted first to a mediator with at least ten years experience in Monterey County. The mediator shall be selected by mutual agreement of the parties. Failing such mutual agreement, a mediator shall be selected by the presiding judge of the Monterey County Superior Court. In the interest of promoting resolution of the dispute, nothing said, done or produced by either party at the mediation may be discussed or repeated outside of the mediation or offered as evidence in any subsequent proceeding. The parties acknowledge the confidentiality of mediation as required by Evidence Code 1152.5.

No mediator shall submit, and no arbitrator or court shall consider, any mediator recommendations, declarations, or findings unless the parties give their written consent to the proposed mediator statement.

19.3. Arbitration (60 days)

If mediation fails to resolve the dispute, the mediator shall become the arbitrator, and shall proceed to dispose of the case under such rules or procedures as he or she shall select. If the mediator is unable or unwilling to serve as arbitrator, the parties shall select an arbitrator by mutual agreement. Failing such agreement, the arbitrator shall be selected by the Presiding Judge of the Superior Court. The decision of the arbitrator shall be final and not subject to judicial litigation.

Arbitration shall be commenced within thirty days of the arbitration demand and concluded within 60 days of arbitration demand.

Arbitration shall follow the so-called "baseball arbitration" rule in which the arbitrator is required to select an award from among the final offers presented by the contending parties. The arbitrator may not render an award that compromises between the final offers.

Unless the arbitrator selects another set of rules, the arbitration shall be conducted under the J.A.M.S. Endispute Streamlined Arbitration Rules and Procedures, but not necessarily under the auspices of J.A.M.S. Upon mutual agreement, the parties may agree to arbitrate under an alternative scheme or statute. The Arbitrator may award damages according to proof. Judgment may be entered on the arbitrator's award in any court of competent jurisdiction.

NOTICE: IN AGREEING TO THE FOREGOING PROVISION, YOU ARE WAIVING YOUR RIGHT TO HAVE YOUR RIGHTS UNDER THIS AGREEMENT TRIED IN A COURT OF LAW OR EQUITY. THAT MEANS YOU ARE GIVING UP YOUR RIGHT TO TRIAL BY JUDGE OR JURY. YOU ARE ALSO GIVING UP YOUR RIGHT TO DISCOVERY AND APPEAL EXCEPT AS PROVIDED IN THE ARBITRATION RULES. IF YOU REFUSE TO ARBITRATE YOUR DISPUTE AFTER A PROPER DEMAND FOR ARBITRATION HAS BEEN MADE, YOU CAN BE FORCED TO ARBITRATE OR HAVE AN AWARD ENTERED AGAINST YOU BY DEFAULT. YOUR AGREEMENT TO ARBITRATE IS VOLUNTARY.

BY INITIALING THIS PROVISION BELOW, THE PARTIES AFFIRM THAT THEY HAVE READ AND UNDERSTOOD THE FOREGOING ARBITRATION PROVISIONS AND AGREE TO SUBMIT ANY DISPUTES UNDER THIS AGREEMENT TO NEUTRAL BINDING ARBITRATION AS PROVIDED IN THIS AGREEMENT.

_____s′ INITIALS_____ _____′S: INITIALS_____

20. Waiver of Rights

20.1 Waiver. No waiver of any breach or default by either party shall be considered to be a waiver of any other breach or default. The waiver by any party for the time for performing any act shall not constitute a waiver of the time for performing any other act or an identical act to be performed at a later time. None of the covenants or other provisions in this Agreement can be waived except by written consent of the waiving party.

21. Notices

21.1 All notices, demands, or other communications which this Agreement contemplates or authorizes shall be in writing and shall be personally delivered, or mailed by certified mail, return receipt requested, or delivered by reliable overnight courier, to the respective party as follows:

To District: Marina Coast Water District
Attn: Marc A. Lucca, General Manager
11 Reservation Road
Marina, California 93933

To Developer: _____
_____
_____
_____

21.2 The address to which notice may be sent may be changed by written notification of each party to the other as above provided.

22. Severability

22.1 If any portion or provision of this Agreement is found to be contrary to law or policy of the law or unenforceable in a court of competent jurisdiction, then the portion so found shall be null and void, but all other portions of the Agreement shall remain in full force and effect.

23. Paragraph Headings

23.1 Paragraph headings are for convenience only and are not to be construed as limiting or amplifying the terms of this Agreement in any way.

24. Successors and Assignees

24.1 This Agreement shall be binding on and benefit the assignees or successors to this Agreement in the same manner as the original parties hereto.

25. Integrated Agreement

25.1 This Agreement integrates and supersedes all prior and contemporaneous Agreements and understandings concerning the subject matter herein. This Agreement constitutes the sole agreement of the parties and correctly sets forth the rights, duties and obligations of each to the others. Future amendments must be in writing signed by the parties. Any prior agreements, promises, negotiations or representations not expressly set forth in this Agreement are of no force and effect.

26. Negotiated Agreement

26.1 This Agreement has been arrived at through negotiation between the parties. Neither party is deemed the party that prepared the Agreement within the meaning of Civil Code Section 1654.

27. Attorneys Fees

27.1 If arbitration or suit is brought to enforce or interpret any part of this Agreement, the prevailing party shall be entitled to recover as an element of costs of suit, and not as damages, a reasonable attorneys' fee to be fixed by the arbitrator or Court, in addition to any other relief granted. The "prevailing party" shall be the party entitled to recover costs of suit, whether or not the suit proceeds to arbitrator's award or judgment. A party not entitled to recover costs shall not recover attorneys' fees. No sum for attorneys' fees shall be counted in calculating the amount of an award or judgment for purposes of determining whether a party is entitled to recover costs or attorneys' fees.

27.2 If either party initiates litigation without first participating in good faith in the alternative forms of dispute resolution specified in this agreement, that party shall not be entitled to recover any amount as attorneys' fees or costs of suit even if such entitlement is established by statute.

28. Exhibits

28.1 All exhibits referred to in this Agreement and attached to this Agreement are incorporated in this Agreement by reference.

29. Disclaimer/Indemnity Regarding Public Works

29.1 District has not determined whether the project would be considered a "Public Works" project for the purposes of California law, and makes no warranties or representations to Developer about whether the project would be considered a "Public Works" project. Developer is aware that if the project is considered a "Public Works" project, then Developer would have to pay "prevailing wages" under California Labor Code section 1771. If Developer fails to pay such prevailing wages, Developer acknowledges that it will be liable to, among other things, pay any shortfall owed as well as any penalties that might be assessed for failure to comply with the law. If Developer does not pay prevailing wages, and an action or proceeding of any kind or nature is brought against the District based on such failure, Developer will defend and indemnify District in the action or proceeding. District agrees to reasonably cooperate and assist Developer in any the defense of any such action.

30. No Third Party Beneficiaries

30.1 There are no intended third party beneficiaries to this Agreement.

31. Compliance with Laws

31.1 Developer will comply with all laws, rules and regulations in carrying out its obligations under this Agreement.

32. Counterparts

32.1 This Agreement may be executed in counterparts, and each fully executed counterpart shall be deemed an original document.

EXAMPLE

Signature Page

By: Developer

_____
_____

By MARINA COAST WATER DISTRICT

_____
Marc A. Lucca, General Manager
Marina Coast Water District

EXAMPLE

EXHIBIT A

CITY RESOLUTION

EXAMPLE

EXHIBIT B

LEGAL DESCRIPTION

Insert by reference title report here.

EXAMPLE

EXHIBIT C

MAP OF DEVELOPMENT

EXHIBIT D

INDEMNIFICATION AGREEMENTS
INSURANCE REQUIREMENTS

CONSTRUCTION CONTRACTORS

Workers' Compensation Insurance - By its signature hereunder, Contractor certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing the performance of the work of this contract.

Indemnification - To the fullest extent permitted by law, Contractor shall indemnify and hold harmless and defend District, its directors, officers, employees, or authorized volunteers, and each of them from and against:

a. Any and all claims, demands, causes of action, damages, costs, expenses, losses or liabilities, in law or in equity, of every kind and nature whatsoever for, but not limited to, injury to or death of any person including District and/or Contractor, or any directors, officers, employees, or authorized volunteers of District or Contractor, and damages to or destruction of property of any person, including but not limited to, District and/or Contractor or their directors, officers, employees, or authorized volunteers, arising out of or in any manner directly or indirectly connected with the work to be performed under this agreement, however caused, regardless of any negligence of District or its directors, officers, employees, or authorized volunteers, except the sole negligence or willful misconduct or active negligence of District or its directors, officers, employees, or authorized volunteers;

b. Any and all actions, proceedings, damages, costs, expenses, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Contractor;

c. Any and all losses, expenses, damages (including damages to the work itself), attorneys' fees, and other costs, including all costs of defense, which any of them may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the work and all of the Contractor's obligations under the contract. Such costs, expenses, and damages shall include all costs, including attorneys' fees, incurred by the indemnified parties in any lawsuit to which they are a party.

d. Consultant acknowledges and understands that the area in and around which the work will be performed has been identified as a possible location of munitions and explosives

of concern ("MEC"). All indemnification obligations of Consultant under this Agreement shall specifically include claims and demands involving, arising out of or related to MEC.

Contractor shall defend, at Contractor's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against District or District's directors, officers, employees, or authorized volunteers.

Contractor shall pay and satisfy any judgment, award or decree that may be rendered against District or its directors, officers, employees, or authorized volunteers, in any such suit, action or other legal proceeding.

Contractor shall reimburse District or its directors, officers, employees, or authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

Contractor agrees to carry insurance for this purpose as set out in the specifications. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the District, or its directors, officers, employees or authorized volunteers.

Commercial General Liability and Automobile Liability Insurance - The Contractor shall provide and maintain the following commercial general liability and automobile liability insurance:

Coverage - Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

1. Insurance Services Office Commercial ***General Liability*** Coverage (Occurrence Form CG 0001)

2. Insurance Services Office ***Automobile Liability*** Coverage (Form CA 0001), covering Symbol 1 (any auto) (owned, non-owned and hired automobiles)

Limits - The Consultant shall maintain limits no less than the following:

1. ***General Liability*** - Two million dollars ($2,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to the District) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit.

2. ***Automobile Liability*** - One million dollars ($1,000,000) for bodily injury and property damage each accident limit.

Required Provisions - The general liability and automobile liability policies are to contain, or be endorsed to contain the following provisions:

1. The District, its directors, officers, employees, or authorized volunteers are to be given insured status (via ISO endorsement CG 2010, CG 2033, or insurer's equivalent for general liability coverage) as respects: liability arising out of activities performed by or on behalf of the Contractors; products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the District, its directors, officers, employees, or authorized volunteers.

2. For any claims related to this project, the Contractor's insurance shall be primary insurance as respects the District, its directors, officers, employees, or authorized volunteers. Any insurance, self-insurance, or other coverage maintained by the District, its directors, officers, employees, or authorized volunteers shall not contribute to it.

3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the District, its directors, officers, employees, or authorized volunteers.

4. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this clause shall state or be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days (10 days for non-payment of premium) prior written notice by U.S. mail has been given to the District.

Such liability insurance shall indemnify the Contractor and his/her sub-contractors against loss from liability imposed by law upon, or assumed under contract by, the Contractor or his/her sub-contractors for damages on account of such bodily injury (including death), property damage, personal injury and completed operations and products liability.

The general liability policy shall cover bodily injury and property damage liability, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, underground excavation and removal of lateral support.

The automobile liability policy shall cover all owned, non-owned, and hired automobiles.

All of the insurance shall be provided on policy forms and through companies satisfactory to the District.

Deductibles and Self-Insured Retentions - Any deductible or self-insured retention must be declared to and approved by the District. At the option of the District, the insurer shall either reduce or eliminate such deductibles or self-insured retentions.

Acceptability of Insurers - Insurance is to be placed with insurers having a current A.M. Best rating of no less than A-:VII or equivalent or as otherwise approved by the District.

MEC Coverage: All insurance maintained by Contractor shall include coverage for services, work in or around MEC, or claims, damage or injury related in any way to this Agreement which arise from MEC. The Marina Coast Water District, its officers, directors and employees and any of its authorized representatives and volunteers shall be named as additional insureds under all insurance maintained by Consultant related in any way to work performed by it on behalf of the Marina Coast Water District.

Workers' Compensation and Employer's Liability Insurance - The Contractor and all sub-contractors shall insure (or be a qualified self-insured) under the applicable laws relating to workers' compensation insurance, all of their employees working on or about the construction site, in accordance with the "Workers' Compensation and Insurance Act," Division IV of the Labor Code of the State of California and any Acts amendatory thereof. The Contractor shall provide employer's liability insurance in the amount of at least $1,000,000 per accident for bodily injury and disease.

Responsibility for Work - Until the completion and final acceptance by the District of all the work under and implied by this Agreement, the work shall be under the Contractor's responsible care and charge. The Contractor shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs occasioned or rendered necessary by causes of any nature whatsoever.

The Contractor shall provide and maintain builder's risk insurance (or installation floater) covering all risks of direct physical loss, damage or destruction to the work in the amount specified in the General Conditions, to insure against such losses until final acceptance of the work by the District. Such insurance shall include[1] explosion, collapse, underground excavation and removal of lateral support. The District shall be a named insured on any such policy. The making of progress payments to the Contractor shall not be construed as creating an insurable interest by or for the District or be construed as relieving the Contractor or his/her subcontractors of responsibility for loss from any direct physical loss, damage or destruction occurring prior to final acceptance of the work by the District.

The insurer shall waive all rights of subrogation against the District, its directors, officers, employees, or authorized volunteers.

Evidences of Insurance - Prior to execution of the contract, the Contractor shall file with the District a certificate of insurance (Acord Form 25-S or equivalent) signed by the insurer's representative. Such evidence shall include an original copy of the additional insured endorsement signed by the insurer's representative. Such evidence shall also include confirmation that coverage includes or has been modified to include Required Provisions 1-5.

The Contractor shall, upon demand of the District, deliver to the District such policy or policies of insurance and the receipts for payment of premiums thereon.

All insurance correspondence, certificates, binders, etc., shall be mailed to:

Marina Coast Water District
11 Reservation Road
Marina, CA 93933
Attn: Administrative Services Manager

Sub-Contractors - In the event that the Contractor employs other contractors (sub-contractors) as part of the work covered by this agreement, it shall be the Contractor's responsibility to require and confirm that each sub-contractor meets the minimum insurance requirements specified above.

EXAMPLE

EXHIBIT E

NOTICE TO BUYERS
OF
WATER & SEWER SURCHARGE PAYMENTS

The Developer will submit the text and format of this Notice to the General Manager of the Marina Coast Water District for review and approval prior to inclusion in the Real estate Public Report or in a letter from the Developer to each prospective property buyer.

APPENDIX 4

SAMPLE WILL SERVE LETTER

Date

Development Company, LLC
Attn: Mr. Developer
10 Subdivision Way
Seaside CA 93955

Subject: Planned Development

Dear Mr. Developer:

This letter is to confirm that the Marina Coast Water District (MCWD) can and will furnish water and sewer service to the above project upon your agreement with and completion of the following requirements to the satisfaction of MCWD:

1. The developer shall furnish written approval from the local jurisdiction (Monterey County, City of Marina, City of Seaside, or City of Del Rey Oaks) of the water allocation for the project. The developer agrees to be solely responsible for determining annual water demand and wastewater generation estimates.
2. The developer shall enter into a Construction and Transfer of Water, Recycled Water, and Sewer Infrastructure Agreement with MCWD prior to beginning the preliminary plan review process or the plan check review process. This agreement and any major infrastructure improvements shall be referenced in the developer agreements with the local jurisdiction.
3. All fees and charges shall be paid in accordance with MCWD Ordinances and at the time specified in the Infrastructure Agreement before initiating preliminary plan review, plan check review and connection to public water and sewer service.
4. The new water, recycled water, and the wastewater collection systems within the project area and connections to and/or abandonment of existing infrastructure shall comply with all MCWD Ordinances. The developer agrees to accept the transfer of ownership of all abandoned facilities as explained in the Infrastructure Agreement. In addition to conforming to District design requirements, the developer agrees to meet California Department of Health Services requirements prior to constructing recycled water facilities.
5. The developer shall provide potable water (including fire flow) and recycled water demand quantities, and wastewater generation figures. The developer agrees to complete a Development Water and Sewer Master Plan as specified in the Infrastructure Agreement. The developer agrees to provide the District at least one month review time for these plans.
6. The developer shall identify any other infrastructure improvements outside the project area that may be necessary as a result of this project. Water and sewer improvements outside of the project area may be borne by the developer in part or in whole depending on an assessment of project benefits.

7. All potable water, recycled water, and sewer infrastructure shall be placed within planned or existing public roadway right-of-way. MCWD may have existing infrastructure that requires relocation as a result of this project. All water and sewer infrastructure easements within the roadway right-of-way of the project will be conveyed to the MCWD prior to acceptance by MCWD.
8. If applicable, any existing wells, septic systems, water and/or sewer pipes within the property lines of the project shall be identified and shall be abandoned according to County Health Department and MCWD requirements.
9. Each business, tenant, residential unit, and common residential or commercial irrigated area, shall be individually metered.
10. All documents shall show that the MCWD is the water purveyor and wastewater collection provider for the former Fort Ord.

Potable water that will be supplied to the development meets requirements of California Department of Health Services and is available for normal use and fire protection.

The MCWD may identify additional requirements upon review of project documents, plans and specifications. If that occurs, we will immediately inform you.

If you have any questions please contact us at (831) 384-6131.

Sincerely,

Marina Coast Water District

cc: File
City Planning Department
Engineering

APPENDIX 5

CHECKLIST FOR PLAN CHECK

MARINA COAST WATER DISTRICT
11 Reservation Road
Marina, CA 93933
(831) 384-6131

PLAN REVIEW CHECKLIST

APPLICANT: Please complete the applicable checklist(s) below. A complete review package, as stated below, must be submitted before the review time begins. After review is complete and MCWD issues its approval, submit to the City a copy of the plans and a copy of MCWD receipt for plan check deposit.

APPLICANT:_____

ADDRESS:_____ APN:_____

DESCRIPTION:_____ PROJECT NO:_____

PLAN CHECKER ASSIGNED:_____

APPLICANT: Submit applicable checklists with plans for review. Initial in the "App. Init." column to indicate those items which are complete. Enter N/A for those items you believe are not applicable.

REVIEWER: The satisfied items, where applicable, are indicated by checkmarks. Items not applicable, or not required, are indicated by "N/A" or "N/R". Unmarked items denote existing deficiencies which must yet be satisfied.

Check as applicable:

__X__ Part A: Administrative Requirements
__X__ Part B: Format Requirements
____ Part C: Requirements for Domestic (Potable) Water Facilities
____ Part D: Requirements for Recycled Water facilities
____ Part E: Requirements for Sewer Facilities
____ Part F: Requirements for Subdivision (Tract/Parcel) Maps
____ Part G: Requirements for Landscaping and Irrigation
____ Part H: Water Conserving Appliances and Fixtures
____ Part I: Requirements for Hot Water Recirculation Systems

PART A: ADMINISTRATIVE REQUIREMENTS

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
A-01	3 bond or blueline copies of public improvement plans (street/ sewer/ water/ storm drain) submitted to the District			
A-02	2 bond or blueline copies of the Subdivision (Tract or Parcel) Map submitted to MCWD for review, all pages intact?			
A-03	1 set of grading plans (for information purposes – 1st Check Only) submitted to MCWD? (Check pad elevations vs. service elevations in zone - can minimum pressure be provided to each lot?)			
A-04	Engineer's estimate (of cost of proposed public sewer and water facilities) submitted?			
A-05	Has the Applicant provided a complete Fees & Changes Worksheet and/or a complete appropriate Connection Form & Permit Application??			
A-06	Plan review and inspection fees paid to MCWD?			
A-07	Water and sewer permit fees, installation fees, and Capacity Charges paid to MCWD?			
A-08	Has the Applicant been made aware of MCWD Code Sections 6.08.090, Paragraph D and 6.12.020, Paragraph D that explain the 1-year time-frame to complete connections and the potential for increased Capacity Charges? See Footnotes 1 and 2.			
A-09	Supporting calculations submitted (for the following items)?			
a)				
b)				
c)				
A-10	Will serve letters:			
	Requested?			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
	Issued?			
A-11	Conceptual project review held with MCWD?			
A-12	Comprehensive legal description (metes and bounds, with exhibit diagram) submitted to MCWD for any newly proposed easements not already recorded on subdivision map?			
A-13	The Applicant is responsible for obtaining street addresses from the City or County agency having jurisdiction, prior to making application for meters. Have street addresses been assigned for each proposed water meter and detector check location?			
A-14	(1) bond or blueline prints, (1) record mylar copy, and digital diskette of "as-built" improvement plans, submitted to MCWD upon completion of all work?			
A-15	(1) bond or blueline prints, (1) record mylar copy, and digital diskette of the final recorded Tract/Parcel map submitted to MCWD upon recordation?			
A-16	Applicant aware that a letter of transmittal must accompany all submittals?			
A-17	Additional requirements satisfied (as follows)?			
a)				
b)				
c)				
d)				
e)				
f)				

Footnotes

1. **The MCWD Code Section 6.08.090, Paragraph D states "If connection is not made to the District's water or recycled water system within one year from the date a capacity charge is paid after the effective date of this provision (August 8, 2007), the difference between the amount of the capacity charge paid and the amount of the revised capacity charge in effect at the time of the connection shall be paid to the District before the connection is installed".**
2. **MCWD Code Section 6.12.020, Paragraph D states "If connection is not made to the District's sewer system within one year from the date a capacity charge is paid after the effective date of this provision (August 8, 2007), the difference between the amount of the capacity charge paid and the amount of the revised capacity charge in effect at the time of the connection shall be paid to the District before the connection is installed".**

3. PART B: FORMAT REQUIREMENTS

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
B-01	Plans submitted for review and approval of proposed construction must be bond or blueline prints of public improvement drawings pertaining to the construction of underground utilities (i.e., sewer, water, storm drain) in a public street, public right-of-way, or dedicated MCWD easement. In general, architectural plans, grading plans, and on-site fire sprinkler plans are unacceptable for this purpose, but may be provided as additional information. Are the proper types of plans submitted?			
B-02	Does each sheet of plans have the signature and valid stamp of a Registered Professional Engineer (P.E. – Civil) or a Registered Civil Engineer (R.C.E.) licensed in the State of California?			
B-03	Are the originals to the plans prepared on ANSI D (22”x34”) or ARCH D (24”x36”) long plastic mylar sheets?			
B-04	Do the plans clearly distinguish between existing facilities and proposed construction?			
B-05	Do the plans clearly identify the type of project and the relative size or scale of the development?			
B-06	Does each sheet have edge borders, minimum 1.5” on left side, and minimum 0.5” on the 3 remaining sides?			
B-07	Are multiple sheet plans stapled or bound on the left-hand side?			
B-08	Is the proposed construction depicted in conformance with the MCWD PROCEDURES GUIDELINES AND DESIGN REQUIREMENTS as well as the “MCWD Code of ordinances? Do the plans reference specific MCWD Standards when applicable?			
B-09	If the plans are for a municipal project, are the plans prepared on an official City or County title block mylar?			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
B-10	If the plans are for an MCWD Capital Project, are the plans prepared on an MCWD title block mylar?			
B-11	Do all sheets have a preparer's logo block at the bottom, which includes the firm's name, address, city, state, zip code, phone number (with area code), and the name of a contact person?			
B-12	Does the front sheet have standard Marina Coast Water District approval signature block for Domestic (Potable) Water Facilities, Sanitary Sewer Facilities, and Recycled Water Facilities, as applicable? (see Figure 1)			
B-13	Does the front sheet provide a signature block for the local fire safety jurisdiction?			
B-14	If the project involves building construction and/or installation of fire protection facilities (such as fire hydrants and detector check assemblies), the fire marshal must approve the plans before MCWD signs the plans (preferably before 2nd plan check with MCWD). Has the Fire Marshall approval been obtained?			
B-15	Are all sheets numbered sequentially and indicate the total number of sheets? (Example: Page 1 of 20, Page 2 of 20, Page 3 of 20, etc.)			
B-16	Are the following MCWD Standard Notes shown (when applicable)?			
a)	Domestic (Potable) Water Notes (Section 400.11 of MCWD Procedures Guidelines and Design Requirements)?			
b)	Sanitary Sewer Notes (Section 500.18 of MCWD Procedures Guidelines and Design Requirements)?			
c)	Off-Site Recycled Water Notes (Section 600.5.7MCWD Procedures Guidelines and Design Requirements)?			
B-17	On MCWD's Standard Notes, is MCWD's phone number correct? It should appear as either (831) 384-6131.			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
B-18	On MCWD's Standard Notes, are the geographical references in agreement with where the project is located? (for example, the notes should not read as if the project is in the City of Seaside when the project is actually in the City of Marina or the County of Monterey.)			
B-19	Are all misspellings and typos corrected?			
B-20	On every sheet, is there an approval section for "REVISIONS", with lines numbered 1, 2, 3, 4, etc. (with a triangle around each number), and vertical columns headed as "DESCRIPTION", "APPROVED BY", and "DATE"?			
B-21	Is there a fully completed "BASIS OF BEARINGS" information block near the bottom of the front sheet?			
B-22	Is there a fully completed "BENCHMARK" information block near the bottom of the front sheet?			
B-23	Are all lot lines and subdivision boundaries clearly shown?			
B-24	Are all existing and proposed easements clearly shown, including MCWD easements?			
B-25	Is there a fully completed "LEGAL DESCRIPTION OF PROPERTY" information block near the bottom of the front sheet?			
B-26	Does the front sheet provide a vicinity map with the project location clearly shown, giving names of adjacent cross street, nearest boulevards and nearest freeways?			
B-27	Does the front sheet clearly give the project location in writing? (See example below.)			
	The information shall include the following: a) The Tract Map Number and Lot Number(s), or Parcel Map Number and Parcel Number(s), or Assessor Parcel Number(s), as applicable. b) The official street address (if known, or location described in terms of cross-streets. c) City/Postal Zone, State and Zip Code. d) If located in Unincorporated Monterey County, so state.			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
B-28	Is there a City Engineer or County Engineer signature block, as applicable, near the bottom of the front sheet?			
B-29	Is there a fully completed "DEVELOPER" information block near the bottom of the front sheet? It shall provide the developer's name, address, city, state, zip code, phone number (with area code), and the name of a contact person.			
B-30	If the property owner is different than the developer, is there a legal owner information block near the bottom of the front sheet? It shall provide the owner's name, address, city, state, zip code, phone number (with area code), and the name of a contact person.			
B-31	Is there an 'UNDERGROUND SERVICE ALERT" section on the front sheet in accordance with Figure 2, Section 2 in Procedures Guide?			
B-32	On Sheet #1 (space permitting) or Sheet #2, is there an itemized materials list entitled "CONSTRUCTION NOTES"? each item shall be sequentially numbered, accurately described, and specify quantity, linear footage, area or volume. Items shall be broken down into the following categories: 1. Domestic Water 2. Recycled Water 3. Sewer			
B-33	On Sheet #1 (space permitting) or Sheet #2, is there an "INDEX MAP" (Scale 1 inch = 100 feet) of the project site? It shall show names of all streets within and bordering the project, existing and proposed utilities, pipelines sizes, and type (material) of pipe. (see Section 2.3.1.D for full requirements.)			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
B-34	If the project is for multi-family residential development, is there a descriptive information table on Sheet #2? The table shall list each assigned building number (#1, #2, #3, etc.), the proposed use of each building (e.g., rental apartment, condominium, recreation building, etc.), the number of stories of each building, the number of dwelling units of each building, the gross square footage of each building, the average square footage per dwelling unit, and the overall gross acreage of the property.			
B-35	If the project is for non-residential development, do the plans show the footprint of each building pad, along with descriptive information? The descriptive information shall include the building's proposed use, the building's gross square footage, the number of actual dwelling units (or the number of equivalent dwelling units (EDU's), and the gross acreage of the property.			
B-36	If the project is for multiple family residential development, do the plans clearly specify whether the project involves construction of rental apartments, condominiums, or townhomes?			
B-37	Are north arrows shown on all maps and drawings, including vicinity maps, index maps, and plan views? North arrows shall point vertically upward, where possible, and be aligned toward "True North", not "Magnetic North".			
B-38	Does Sheet #1 (space permitting) or Sheet #2 contain a legend which defines all shorthand nomenclature?			
B-39	Additional requirements satisfied (as follows)?			
a)				
b)				
c)				
d)				

PART C: REQUIREMENTS FOR DOMESTIC (POTABLE) WATER FACILITIES

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
C-01	Is the preparer aware that public domestic water mains must be approved in the Subdivision master plan. Check the subdivision master plan for sizes and verify service elevation versus pad elevation to confirm min. pressure for each lot.			
C-02	Is it stated whether the domestic water system within the project is "public" (MCWD owned and maintained) or "private" (property owner owned and maintained)? The jurisdictional boundary must be clearly delineated.			
C-03	If the domestic water system is "private", is it depicted as showing one or more master-meters for the entire site, located in the public right-of-way or in an MCWD easement at the property entrance?			
C-04	Are crossing (invert) elevations given when a domestic waterline crosses another pipeline?			
C-05	Are section views of all domestic water mains (which cross sewer mains) shown in the profile view of the sewer main?			
C-06	Do domestic water mains and water service laterals conform to MCWD Standards (with respect to following)?			
a)	Correct size (Mains: 6", 8", 10"; Service Laterals: 1", 2", 4", 6", 8", or 10").			
b)	Correct material (PVC C-900 Class 200 or DIP Class 250 for mains and large laterals; Copper or Polyethylene for 1" and 2" laterals).			
c)	Acceptable radius of curvature of pipeline layout (for main lines, allowable curvature dependent on pipe size and material; service laterals must be straight).			
d)	Minimum depth of cover (Public Facilities: 42" for residential, 48" for nonresidential; Private Facilities: governed by local building codes or by Uniform Plumbing Code).			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
e)	Horizontal clearance with other utilities (minimum 10 feet from sewer, storm drain, recycled water, and hydrocarbon; otherwise, protective encasing or higher grade pipe material required).			
f)	Vertical clearance with other utilities (minimum 1 foot without joints, with domestic waterlines above all other pipelines). If storm drain must be above the domestic water, add the note "Center one joint of pipe underneath the Storm drain".			
g)	Distance off curb face (6 feet for domestic waterlines, where possible, but never less than 4 feet).			
C-07	Are street station numbers shown for appurtenances coming off of main line (e.g., for fire hydrants, blow-offs, service laterals, valves, etc.) where applicable?			
C-08	Are easements for domestic water facilities properly sized? Domestic waterline easements to MCWD must be a minimum of 20 feet wide, and must provide a minimum of 5 feet of clearance around all above-ground facilities. Actual easement width shall be twice the average pipe depth, rounded upward to the nearest 10 feet.			
C-09	A minimum of 2 adjacent meters are required for manifolding domestic water meters. Otherwise, each meter must come off the main line with individual service laterals.			
C-10	MCWD does not allow water service laterals connected to firelines. Do plans reflect this requirement?			
C-11	Are domestic water shut-off valves spaced such that no more than 2 fire hydrants are shut off at one time?			
C-12	Dead-end waterlines are limited to 28 dwelling units or 600 feet (whichever comes first). Otherwise a looped water system with at least 2 points of connection is required.			
C-13	Are service laterals for fire hydrants straight? They cannot be bent, curved, or elbowed.			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
C-14	Do all non-residential domestic (potable) water service laterals have reduced pressure backflow devices on the customer side of the meter?			
C-15	Domestic water service laterals cannot be run across an adjacent property line (except under certain hardship cases). Is this requirement met?			
C-16	Each building receiving water must have at least one water service lateral, coming directly off the main line, or off of a manifolded service assembly. Is this requirement met?			
C-17	Water service laterals cannot come off of other water service laterals. Is this requirement met?			
C-18	On single-family residences water service laterals may be dimensioned from the property line or by street stations. Is this requirement met?			
C-19	Are the proper types of fire hydrants installed? (MCWD Std. W-8)			
C-20	On single family residences, water service laterals shall not go under driveway approaches. Is this requirement met?			
C-21	Are blowoffs installed at the end of all mains and large water service stubouts? They are required for testing and flushing purposes.			
C-22	Are air vacuum release valves installed at all water main high points for 10-inch pipe and larger?			
C-23	Do fire hydrant spacing and coverage comply with MCWD Standard Section 3, Fig. 1, and with the requirements of the local Fire Marshal?			
C-24	If project is residential or medium to large-scale commercial/industrial, are there at least 2 points of connection to MCWD's water system?			
C-25	Are all existing MCWD domestic water facilities completely and correctly depicted?			
C-26	Are all existing and proposed points of connection to existing domestic water facilities properly depicted?			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
C-27	Are all proposed domestic water facilities in conformance with the appropriate MCWD Subdivision Master Plan?			
C-28	Are MCWD's conditions of approval on the subdivision map and "will-serve" letter satisfied?			
C-29	Cross-connections between recycled water facilities and potable water facilities are forbidden. Is this requirement complied with?			
C-30	Additional requirements satisfied (as follows)?			
a)				
b)				
c)				
d)				
e)				

PART D: REQUIREMENTS FOR RECYCLED WATER FACILITIES

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
D-01	Is the preparer aware that public recycled water mains are approved in the subdivision master plan?			
D-02	Is it stated whether the recycled water system within the project is "public" (MCWD owned and maintained) or "private" (property owner owned and maintained)? The jursidictional boundary must be clearly delineated.			
D-03	If the recycled water system is "private", is it depicted as showing one or more master meters for the entire site, located in a public right-of-way or in an MCWD easement at the property entrance?			
D-04	Recycled water for fire hydrants is prohibited. Are fire hydrants shown connected only to the potable water system (instead of to the recycled water system)?			
D-05	Recycled water service laterals do not require reduced pressure principle (RPPD) backflow devices. Are recycled water service laterals called out w/o RPPD's?			
D-06	Is preparer of plans aware that watering of landscape areas requires the use of recycled water (where such facilities exist)? Plans must be shown to reflect landscape areas being served by recycled water, where recycled water is available.			
D-07	Are high-rise buildings (those 55-feet and taller) using recycled water for toilet flushing, where recycled water is available?			
D-08	Are crossing invert elevations given when a recycled waterline crosses another pipeline?			
D-09	Are section views of all recycled water mains (which cross sewer mains) shown in the profile view of the sewer main?			
D-10	Do recycled water mains and water service laterals conform to MCWD Standards (with respect to the following)?			
a.)	Correct size (Mains: 4"; Service Laterals: 1", 2", 4").			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
b.)	Correct material (DIP Class 250, or PVC Class C-900 for mains and 4" laterals; Copper or Polyethylene for 1" and 2" laterals).			
c.)	Acceptable radius of curvature of pipeline layout (for main lines, allowable curvature dependent upon pipe size and material; service laterals must be straight).			
d.)	Minimum depth of cover (Public Facilities: 53' for 4", 60' for 6" and larger; Private Facilities: governed by local building codes or by Uniform Plumbing Code).			
e.)	Horizontal clearance with other utilities (minimum 10 feet from storm drain, domestic water, and hydrocarbon; otherwise protective casing or higher grade pipe material required).			
f.)	Vertical clearance with other utilities (minimum 1 foot without joints, with recycled waterlines below domestic waterlines).			
g.)	Distance off curb face (4 feet or 8 feet for recycled waterlines, where possible, but never at 6 feet to avoid mistaking with potable).			
D-11	Are street station numbers shown for all appurtenances coming off of main line (e.g., for blowoffs, service laterals, valves, etc.) where applicable?			
D-12	Are easements for recycled water facilities properly sized? Recycled waterline easements to MCWD must be a minimum of 20 feet wide, and must provide at least 10 feet of clearance around all above-ground facilities. Actual easement width shall be twice the average pipe depth, rounded upward to the nearest 10 feet.			
D-13	A minimum of 2 adjacent meters are required for manifolding recycled water meters. Otherwise each meter must come off the main line with individual service laterals. Do the manifolds depicted on the plans each have a minimum of 2 meters?			
D-14	Recycled water service laterals cannot be run across an adjacent property line (except under certain hardship cases). Is this requirement met?			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
D-15	Water service laterals cannot come off of other water service laterals. Is this requirement met?			
D-16	Are air vacuum release valves installed at all water main high points for 8-inch pipe and larger?			
D-17	Are all existing MCWD recycled water facilities completely and correctly depicted?			
D-18	Are all existing and proposed points of connection to existing recycled water facilities properly depicted?			
D-19	Are all proposed recycled water facilities in conformance with the appropriate MCWD Subdivision Master Plan?			
D-20	Are MCWD's conditions of approval on the subdivision map and "will-serve" letter satisfied?			
D-21	Hose bibs on recycled water facilities are forbidden. Is this requirement complied with?			
D-22	Potable and recycled water facilities are not to be installed in the same trench, and DHS approval is required if horizontal separation is less than 10 feet. Is this requirement complied with?			
D-23	Cross-connections between potable water facilities and non-potable water facilities (including sewer) are forbidden. Is this requirement complied with?			
D-24	Are irrigation/landscape points of connection (P.O.C.'s) clearly identified and called out on the civil street improvement drawings?			
D-25	Additional requirements satisfied (as follows)?			
a)				
b)				
c)				
d)				

PART E: REQUIREMENTS FOR SEWER FACILITIES

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
E-01	Is the preparer aware that public sewer mains must be approved in the subdivision master plan?			
E-02	Is it stated whether the sanitary sewer system within the project is "public" (MCWD owned and maintained) or "private" (property owner owned and maintained)? The jurisdictional boundary must be clearly delineated.			
E-03	MCWD requires a terminal manhole (for 8-inch laterals and larger) or a terminal cleanout (for laterals smaller than 8-inch) at the property line or jurisdictional boundary of MCWD.			
E-04	Drop manholes only allowed by exception. Is this requirement complied with?			
E-05	Reverse horizontal curves are not allowed. Is this requirement complied with?			
E-06	Vertical concave or convex curves are not allowed. Is this requirement complied with?			
E-07	Slopes in excess of 45 degrees to the horizontal are not allowed. Is this requirement complied with?			
E-08	Trees and buildings are not allowed over sewer easements. Is this requirement complied with?			
E-09	Except in special cases, block walls are not allowed over sewer easements. Is this requirement complied with?			
E-10	Are crossing (invert) elevations given when a sanitary sewer line crosses another pipeline?			
E-11	Are section views of all pipelines crossing sewer mains shown in the profile view of the sewer main?			
E-12	Do sanitary sewer mains and laterals conform to MCWD Standards (with respect to the following)?			
a)	Correct size (Mains: 8", 10"; and Laterals: 4", 6").			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
b)	Correct material (SDR-35 PVC, PS-46 PVC or PS-111 PVC).			
c)	Acceptable radius of curvature of pipeline layout (for main lines, allowable curvature dependent upon pipe size and material; service laterals must be straight).			
d)	Minimum depth of cover (Public Facilities: 7 feet; Private Facilities: 6 feet under sidewalk, with 2 percent pipe slope up to property line or terminal cleanout).			
e)	Horizontal clearance with other utilities (Minimum 10 feet from domestic water, recycled water, storm drain, and hydrocarbon. Otherwise, protective encasement or higher grade pipe material required).			
f)	Vertical clearance with other utilities (minimum 1 foot without joints, with sewerlines being below all other pipelines).			
g)	Distance off street centerline (5 feet where possible, preferably at or near center of driving lane).			
E-13	Are sewer station numbers XX+XX.XX, independent of street station numbers, given for all appurtenances (e.g., manholes, laterals, etc.) along the path of the sewerline?			
E-14	Are easements for sewer facilities properly sized? Sewer easements to MCWD must be a minimum of 20 feet wide. Actual width should be twice the average pipe depth, rounded upward to the nearest 5 feet.			
E-15	Does each building have at least one (1) separate lateral coming off the main line?			
E-16	Sewer laterals cannot run across an adjacent property line (except under certain hardship cases, such as “landlocked” properties). Is this requirement met?			
E-17	Sewer laterals cannot come off of other sewer laterals. Is this requirement met?			
E-18	On single family residences, sewer laterals must be either stationed or dimensioned from the property line. Is this requirement met?			
E-19	On single family residences, sewer laterals and water service laterals should be at least 5 feet apart (10-ft preferred).			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
E-20	A manhole is required when a common sewer lateral has branches going to more than one building. A manhole is required at each junction point, along with an MCWD strip easement around the common lateral and manhole(s). Is this requirement met?			
E-21	If a sewer lateral serves one building only, is a cleanout (rather than a manhole) installed at the property line, or at the end of MCWD's sewer easement?			
E-22	Are all existing MCWD sewer facilities completely and correctly depicted?			
E-23	Are all existing and proposed points of connection to existing sewer facilities correctly depicted?			
E-24	Are all proposed sewer facilities in conformance with all applicable MCWD Master Plans?			
E-25	Are MCWD's conditions of approval on the subdivision map and "will-serve" letter satisfied?			
E-26	Are elevation differentials across manholes correct?			
a)	0.10 foot minimum for straight runs.			
b)	0.20 foot minimum for right angle turns.			
E-27	Residential sewer laterals must have backflow prevention devices or combination backflow prevention device and cleanout. Exceptions may be requested if the nearest upstream manhole rim elevation is below the pad elevation. Is this requirement complied with?			
E-28	Additional requirements satisfied (as follows)?			
a)				
b)				
c)				
d)				
e)				
f)				

PART F: REQUIREMENTS FOR SUBDIVISION (TRACT/PARCEL) MAPS

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
F-01	Are streets appropriately labeled as "PUBLIC" or "PRIVATE"?			
F-02	Does the map have standard MCWD conveyance/acceptance and notary certificates?			
F-03	Does the map have the proper acknowledgements?			
F-04	Are MCWD easements shown properly sized?			
F-05	Do MCWD easements agree with those depicted on the improvement plans?			
F-06	Has a copy of the title report been submitted to MCWD?			
F-07	Have other legal descriptions of easements (recorded after subdivision map) been submitted for review?			
F-08	Have Tentative Map Conditions of Approval been submitted to MCWD for review?			
F-09	Have bond or blueline copies, record (contact) mylar copy and digital diskette of the final recorded Tract/Parcel Map been submitted to MCWD?			
F-10	Additional requirements satisfied (as follows)?			
a)				
b)				
c)				
d)				
e)				
f)				

PART G: REQUIREMENTS FOR LANDSCAPING AND IRRIGATION

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
G-01	Has an On-site Recycled Water User Plan been prepared and submitted?			
G-02	Has a Water Conservation Concept Statement been completed and attached as a cover sheet to the Landscape Documentation Package for submission to the district? The Water Conservation Concept Statement includes a checklist to verify that the data required by Section 700.4 of the MCWD Procedures, Guidelines, and Design Requirements has been compiled. *This document also includes a statement of projected water use for the project.*			
a)	Individual Meter Data			
b)	Project's Total Landscape Area			
c)	Project's Recreational Turf Area			
d)	Project's Water Budget			
e)	Project's Water Use			
f)	Effective Precipitation Disclosure Statement			
G-02	Have all the MCWD Water Use Spreadsheets been completed and submitted?			
a)	MCWD Landscape Site Data Sheet			
b)	Calculation of Maximum Applied Water Allowance			
c)	Calculation of Estimated Total Water Use for individual meters and the complete project			
d)	ET-Based Irrigation Schedule for the Establishment Period			
e)	ET-Based Irrigation Schedule for the Mature Landscape			
f)	Estimated Applied Water Use (based on the irrigation schedule)			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
G-03	Has an Irrigation System Map been created and submitted?			
G-04	Has a Valve Site Map been created and submitted?			
G-05	Have both the Landscape Maintenance and Irrigation Maintenance Schedules been created and submitted?			
a)	Landscape Maintenance Schedule			
b)	Irrigation System Maintenance Schedule			
G-06	Has a Soil Analysis been performed and a Soil Amendment Recommendation been made?			
a)	Soil Analysis			
b)	Soil Amendment Recommendation			
G-07	Is there a statement included in the plans that outlines the requirement to complete the Certificate of Substantial Completion?			
G-08	If required, has a Public Information Plan been created and submitted?			
a)	Homeowner Packet w/ publications			
b)	Landscape Demo Home			
c)	Public Demonstration Garden (optional)			
G-10	Are complete landscape plan sheets submitted?			
G-10	Has a complete cover sheet for the landscape plans been submitted?			
a)	Scale			
b)	North arrow			
c)	Vicinity Map			
d)	Contact Information			
e)	Signature block			
G-11	Has a complete planting plan been submitted?			
a)	Plant materials legend			
b)	Planting details			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
c)	Amendment and mulch schedule i) Determination of Soil Texture ii) Soil Infiltration Rate iii) Measured pH and Total Soluble Salts iiii) Mulch layer at least three inches in depth			
d)	Planting notes			
G-12	Has a complete irrigation plan been submitted?			
a)	Irrigation materials legend			
b)	Irrigation details			
c)	Pressure/flow calculations			
d)	Performance characteristics			
e)	Irrigation application schedules			
f)	Proper controller and rain switch			
g)	Flow control and alarm devices			
h)	Basket strainer			
G-13	Has a complete site grading/drainage plan been submitted?			
G-14	Have specifications for the landscape and irrigation plans been submitted?			

PART H: WATER CONSERVING APPLIANCES AND FIXTURES

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
H-01	Are High Efficiency Toilets (HET's) that meet the District's *Standard Specifications* installed in the New Construction project?			
H-02	Is there one control valve, or one set of hot and cold valves for each Low Flow Showerhead?			
H-03	Do all showerheads have a maximum flow capacity of 2.5 gallons per minute?			
H-04	Are all urinals zero water use urinals in that they do not use water to flush waste?			
H-05	Do all residential units equipped with clothes washer connections have High Efficiency (HE) Clothes Washer(s) meeting district *Standard Specifications* installed?			
H-06	Are all newly constructed multifamily dwelling units, including condominiums, detached units (carriages houses/granny units) and time-share units metered individually?			
H-07	Are all newly constructed hotel/motel units greater than or equal to one thousand (1000) square feet separately metered?			
H-08	Do all new additions, renovations or remodels include the retrofitting of all existing toilets and showerheads with low-flow showerheads, ULFT's, or HET's?			
H-09	Are all multifamily units converted into condominiums or timeshare units individually metered?			
H-10	Are all motel/hotel units converted into multifamily units, time-share units or condominiums individually metered?			
H-11	Are all time-share units converted into multifamily units, condominiums, or motel/hotel units individually metered?			
H-12	Are all condominium units converted into multifamily units, time-share units or motel/hotel units individually metered?			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
H-13	Are all other uses, such as landscape irrigation systems and laundry, other than domestic household use in multifamily dwelling complexes metered separately and approved by the District Engineer or his/her designee?			
H-14	Have the submittals for water conserving appliances and fixtures required by MCWD been prepared?			
a)	Materials list showing materials utilized.			
b)	Certificates of Compliance.			

PART I: REQUIREMENTS FOR HOT WATER RECIRCULATION SYSTEMS

Reviewer Name:	
Results	___ Approved ___ Approved with Exceptions ___ Not Approved. Revise and Resubmit

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
I-01	Is the Hot Water Recirculation System or Point-of-Use Hot Water Heater that supplies water to hot water fixtures further than ten linear feet of pipe away from the hot water heater?			
I-02	Do the On-Demand Controlled Recirculation Systems have pumps sized to move the water between 5 and 8 gpm in the recirculation loop?			
I-03	Are Hot Water recirculation pumps and point-of-use Hot Water Heaters being installed with unions and manual isolation valves to facilitate repair and replacement?			
I-04	Is there one activation mechanism installed for each hot water location when using an On-Demand Hot Water System?			
I-05	Is the manufacturer of the Hot Water Recirculation System components acceptable to the District?			
I-06	Do all time and temperature controlled recirculation systems include a thermostatic control (aquastat)?			
I-07	Do all the hot water systems have a dedicated hot water return line preferably connected to the water heater drain outlet?			
I-08	is there a check valve installed in the recirculation loop, as close to the water heater as possible to prevent unintentional circulation?			
I-09	Does the recirculation loop have a minimum diameter of ¾" nominal?			
I-10	Do all branch lines off the recirculation loop have a maximum length of 10 lineal feet? Authorized exceptions include island sinks, tubs, and washing machines.			
I-11	Is each fixture served with its own branch line? Exceptions must be authorized by the District.			
I-12	Is the entire recirculation loop insulated according to California code?			

No.	Item	App. Init.	Rev. Init.	Reviewer Comments
I-13	Are operational instructions and directional stickers provided for activation devices and recirculation timers and controls?			
I-14	Has the designed equivalent length of the recirculation loop been kept to a minimum by minimizing the number of fittings and using manufactured wide sweeping elbows and bendable copper?			
I-15	Is the hot water system designed to meet the requirement that less than two cups of cool water come out of each fixture before hot water arrives at that fixture?			
I-16	Do all hot water recirculation systems have a minimum two year guarantee from the date of manufacture?			

APPENDIX 6

BOND WORKSHEET

DOMESTIC WATER, SEWER, RECYCLED WATER
BOND WORKSHEET

DEVELOPMENT ADDRESS: _____
CITY:_____ TRACT(S): _____
DATE: _____
DEVELOPER: _____

DOMESTIC WATER

ITEM	QUANTITY	UNIT COST ($/unit)	TOTAL COST (Dollars)
8" PVC	LF		
12"PVC	LF		
8" DIP	LF		
12" DIP	LF		
16" DIP	LF		
8" VALVE	EA		
12" VALVE	EA		
16" VALVE	EA		
8" HOT TAP	EA		
12" HOT TAP	EA		
16" HOT TAP	EA		
B.O VALVE – 4" W	EA		
B.O VALVE – 8" W	EA		
B.O VALVE – 12" W	EA		
B.O. VALVE – 16"W	EA		
A.R. VALVE – 8" W	EA		
A.R. VALVE – 12" W	EA		
A.R. VALVE – 16" W	EA		
FIRE HYDRANT	EA		
4" DETECTOR CHECK	EA		
6" DETECTOR CHECK	EA		
8" DETECTOR CHECK	EA		
10" DETECTOR CHECK	EA		
RESIDENTIAL SERVICE	EA		
COMMERCIAL SERVICE			
1-1/2" METER	EA		
2" METER	EA		
3" COMPOUND METER	EA		
4" COMPOUND METER	EA		
IRRIGATION SERVICE			
1-1/2" IRRIGATION SVC	EA		
2" IRRIGATION SVC	EA		
TOTAL			

Estimate to be prepared by Developer's Engineer.
Add lines as needed to cover the full scope of work.

DOMESTIC WATER BOND AMOUNT (Round up to nearest $1,000): _____

DOMESTIC WATER, SEWER, RECYCLED WATER
BOND WORKSHEET

DEVELOPMENT ADDRESS: _____
CITY:_____ TRACT(S): _____
DATE: _____
DEVELOPER: _____

SEWER

ITEM	QUANTITY	UNIT COST ($/unit)	TOTAL COST (Dollars)
8” PVC	LF		
10”PVC	LF		
12” PVC	LF		
15” PVC	LF		
48” MANHOLE	EA		
60” MANHOLE	EA		
72” MANHOLE	EA		
SERVICE LATERAL	EA		
CLEANOUT	EA		
TOTAL			

Estimate to be prepared by Developer’s Engineer.
Add lines as needed to cover the full scope of work.

SEWER BOND AMOUNT (Round up to nearest $1,000): _____

DOMESTIC WATER, SEWER, RECYCLED WATER
BOND WORKSHEET

DEVELOPMENT ADDRESS: _____
CITY:_____ TRACT(S): _____
DATE: _____
DEVELOPER: _____

DOMESTIC WATER

ITEM	QUANTITY	UNIT COST ($/unit)	TOTAL COST (Dollars)
6" PVC	LF		
8" PVC	LF		
10" PVC	LF		
12"PVC	LF		
16" PVC	LF		
6" HOT TAP	EA		
6" VALVE	EA		
2" A.R. VALVE	EA		
2" BLOWOFF	EA		
IRRIGATION SERVICE	EA		
1" IRRIGATION SERVICE	EA		
1-1/2" IRRIGATION SERVICE	EA		
2" IRRIGATION SERVICE	EA		
TOTAL			

Estimate to be prepared by Developer's Engineer.
Add lines as needed to cover the full scope of work.

RECYCLED WATER BOND AMOUNT (Round up to nearest $1,000): _____

APPENDIX 7

DEVELOPER'S REQUIRED ITEMS CHECKLIST

DEVELOPER'S REQUIRED ITEMS CHECKLIST

Date: _____ Phone: _____

To: _____ Fax: _____

_____

Track/PM#: _____

MCWD must receive the following items (of the checked boxes only) prior to MCWD plan approval.

Required/Date Received

□_____ **GRADING INSPECTION DEPOSIT**: If grading will occur near MCWD existing facilities prior to or during the plan check process, a minimum grading inspection of $1,000 is required, or the inspection will be charged to the plan check work order.

□_____ **ENGINEER'S FIRE FLOW CALCULATIONS**: Provide fire flow calculations per requirements of Fire Agency having jurisdiction (City/County). *Due before 2nd plan check.*

□_____ **SOILS REPORT**: Provide a soils report from a certified geo-technical firm.

□_____ **FEE TITLE PARCEL**: A Grant Deed to MCWD for Fee title parcel(s) will be required for locations where MCWD's facilities are not in a dedicated public right of way. Fee title document(s) shall include the legal description, a plat and the Grantor's signature.

□_____ **QUITCLAIM DEED**: At the request of the Developer, MCWD will prepare and process Quitclaim Deeds for the Developer in order to abandon existing easements.

□_____ **ENGINEER'S COST ESTIMATE**: Submit and updated Engineer's Cost Estimate. The Engineer's Cost Estimate shall include a unit cost for each item listed on the quantity estimate on plans.

□_____ **AutoCAD DISKETTE**: Submit an AutoCAD diskette in accordance with **MCWD 's Digital Plan Submittal**. The diskette should contain the plan information that is ready to be approved so that all plan check comments are reflected. **PLEASE SUBMIT IN AutoCAD 2002 OR EARLIER**. Must be provided when mylars are submitted for signature.

□_____ **RECORD MAP**: Provide a copy of the Record Map to MCWD. A Copy of the **Recorded** Record Map will be required as a condition of MCWD's final acceptance of the water facilities. **If the Tract Map has not been recorded, then a blanket easement will be required**. *Must be provided for final acceptance of water system.*

□_____ **WATER CONSERVATION CERTIFICATION**: Developer provides letter certifying it has complied with the District's Water Conservation Ordinance and agrees to make any corrections needed upon inspection after all work is complete.

NOTE: The Plan Check/Work Order balance must be current prior to MCWD's signature on plans.

CC: □ Developer/Owner_____

□ MCWD- Tract File

APPENDIX 8

CONSTRUCTION PERMIT APPLICATION

MARINA COAST WATER DISTRICT
11 Reservation Road
Marina, CA 93933
(831) 384-6131

PERMIT APPLICATION

Date Issued	MCWD Number	Residential/ Commercial

Local Agency	
Local Agency Approval Date	
Agency Permit Number	
Type of Improvement	

Street Address	
APN	
Owner	
Phone	
Contractor	
Phone	

MCWD APPLICATION APPROVED BY _____

THE ABOVE APPROVAL GRANTS PERMISSION TO DO THE WORK COVERED BY THIS APPLICATION IN ACCORDANCE WITH PLANS AS APPROVED AND ALL APPLICABLE CITY AND STATE ORDINANCES, REGULATIONS AND LAWS GOVERNING LOCATION, CONSTRUCTION AND OCCUPANCY OF BUILDING.

EXPIRATION OF PERMIT
This permit expires if the building or work authorized herein is not commenced within 180 days from date of approval, or if work is suspended for a permit of 180 days or abandoned, after expiration, this permit must be renewed before the work may be commenced again.

Job Inspection Record

Inspection	Date	Inspector	Remarks
Mark & Locate			
Pre-Construction Mtg			
Pipe Abandonment			
Water			
Foundation Prep			
Mainline (Pipeline & Testing)			
Service Lateral Plumbing & Connection to Main			
Service Lateral Pressure Test			
Backflow Devices			
Bacti Tests			
Backfill			
Sewer			
Foundation Prep			
Mainline (Pipeline & Testing)			
Building Lateral, Connection & Cleanout			
Sewer Lateral & Connection			
Pressure or Water Testing			
Backfill			
Final Inspection			

APPENDIX 9

COST OF CONSTRUCTION STATEMENT

(DOMESTIC WATER, SEWER, AND RECYCLED WATER SYSTEMS)

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 9A

COST OF CONSTRUCTION STATEMENT
DOMESTIC WATER SYSTEM

Developer's Name

Tract No._____ Date Prepared_____

Item	Quantity	Unit Price	Total Cost
			$

"SAMPLE FORM"

ITEMIZE TOTAL CONSTRUCTED COSTS

Subtotal:

GRAND TOTAL INSTALLATION COST: $

Prepared by_____

My signature as witnessed here below attests that under penalty of perjury, the above statement is true and correct to the best of my knowledge.

Date:_____ Developer_____

Official Title_____

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 9B

COST OF CONSTRUCTION STATEMENT
SEWER SYSTEM

Developer's Name

Tract No._____ Date Prepared_____

Item	Quantity	Unit Price	Total Cost
			$

"SAMPLE FORM"

ITEMIZE TOTAL CONSTRUCTED COSTS

Subtotal:

GRAND TOTAL INSTALLATION COST: $

Prepared by_____

My signature as witnessed here below attests that under penalty of perjury, the above statement is true and correct to the best of my knowledge.

Date:_____ Developer_____

Official Title_____

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 9C

COST OF CONSTRUCTION STATEMENT
RECYCLED WATER SYSTEM

Developer's Name

Tract No._____ Date Prepared_____

Item	Quantity	Unit Price	Total Cost
			$

"SAMPLE FORM"

ITEMIZE TOTAL CONSTRUCTED COSTS

Subtotal:

GRAND TOTAL INSTALLATION COST: $

Prepared by_____

My signature as witnessed here below attests that under penalty of perjury, the above statement is true and correct to the best of my knowledge.

Date:_____ Developer_____

Official Title_____

APPENDIX 10

BILLS OF SALE

(DOMESTIC WATER, SEWER, AND RECYCLED WATER SYSTEMS)

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 10A

BILL OF SALE
DOMESTIC WATER SYSTEM FACILITIES

For good and valuable consideration, receipt of which is hereby acknowledged, the undersigned does hereby transfer and convey to the Marina Coast Water District, a California Water District organized under State Law, and its successors and assigned, all right, title, and interest in and to the domestic water installation, including pipelines, valves, service connections, fire hydrants, meters, and other appurtenances to said domestic water installation, constructed, installed, and located in the property described below, and further warrants that the same is free and clear of any encumbrances.

Said property is described as follows:

Executed this _____day of , _____20____ .

Company or Corporation Name:

By_____
President

By_____
Secretary

CERTIFICATE OF ACCEPTANCE

As per Resolution No._____ as set forth in the minutes of a meeting of the Board of Directors of the Marina Coast Water District held on _____, the above Bill of Sale of Domestic Water System Facilities, dated _____, is hereby accepted by order of the Board of Directors of the Marina Coast Water District, a California Water District organized under State Law.

Date of Acceptance _____.

By _____
General Manager
MARINA COAST WATER DISTRICT

IN WITNESS WHEREOF, the other parties have duly caused their authorized signatures to be attached hereto, SIGNATURES MUST BE NOTARIZED.

APPLICANT:

By _____

By _____

Date _____

PROPERTY OWNER

By _____

By _____

Date _____

MARINA COAST WATER DISTRICT

By _____
General Manager

Date _____

EXHIBIT A – PROPERTY DESCRIPTION

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 10B

BILL OF SALE
SEWER SYSTEM FACILITIES

For good and valuable consideration, receipt of which is hereby acknowledged, the undersigned does hereby transfer and convey to the Marina Coast Water District, a California Water District organized under State Law, and its successors and assigned, all right, title, and interest in and to the sewer installation, including mains, manholes, laterals, and other appurtenances to said sewer installation, constructed, installed, and located in the property described below, and further warrants that the same is free and clear of any encumbrances.

Said property is described as follows:

Executed this _____day of , _____20____ .

Company or Corporation Name:

By_____
President

By_____
Secretary

CERTIFICATE OF ACCEPTANCE

As per Resolution No._____ as set forth in the minutes of a meeting of the Board of Directors of the Marina Coast Water District held on _____, the above Bill of Sale of Domestic Water System Facilities, dated _____, is hereby accepted by order of the Board of Directors of the Marina Coast Water District, a California Water District organized under State Law.

Date of Acceptance _____.

By _____
General Manager
MARINA COAST WATER DISTRICT

IN WITNESS WHEREOF, the other parties have duly caused their authorized signatures to be attached hereto, SIGNATURES MUST BE NOTARIZED.

APPLICANT:

By _____

By _____

Date _____

PROPERTY OWNER

By _____

By _____

Date _____

MARINA COAST WATER DISTRICT

By _____
General Manger

Date _____

EXHIBIT A – PROPERTY DESCRIPTION

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 10C

BILL OF SALE
RECYCLED WATER SYSTEM FACILITIES

For good and valuable consideration, receipt of which is hereby acknowledged, the undersigned does hereby transfer and convey to the Marina Coast Water District, a California Water District organized under State Law, and its successors and assigned, all right, title, and interest in and to the recycled water installation, including pipelines, valves, service connections, meters, and other appurtenances to said recycled water installation, constructed, installed, and located in the property described below, and further warrants that the same is free and clear of any encumbrances.

Said property is described as follows:

Executed this _____day of , _____20____ .

Company or Corporation Name:

By_____
President

By_____
Secretary

CERTIFICATE OF ACCEPTANCE

As per Resolution No._____ as set forth in the minutes of a meeting of the Board of Directors of the Marina Coast Water District held on _____, the above Bill of Sale of Domestic Water System Facilities, dated _____, is hereby accepted by order of the Board of Directors of the Marina Coast Water District, a California Water District organized under State Law.

Date of Acceptance _____.

By _____
General Manager
MARINA COAST WATER DISTRICT

IN WITNESS WHEREOF, the other parties have duly caused their authorized signatures to be attached hereto, SIGNATURES MUST BE NOTARIZED.

APPLICANT:

By _____

By _____

Date _____

PROPERTY OWNER

By _____

By _____

Date _____

MARINA COAST WATER DISTRICT

By _____
General Manager

Date _____

EXHIBIT A – PROPERTY DESCRIPTION

APPENDIX 11

SUMMARY OF FEES AND CHARGES

MARINA
WATER & WASTEWATER SYSTEM
RATES, FEES and CHARGES
FY 2009 - 2010
Effective July 1, 2009

Water Consumption Charge

0 - 8 hcf	First Tier	1.93 per hcf
8 - 16 hcf	Second Tier	2.35 per hcf
16+ hcf	Third Tier	4.29 per hcf

Monthly Minimum Water Charges

Size	Fee	
5/8" or 3/4"	$15.87	per month
1"	$39.66	per month
1 1/2"	$79.32	per month
2"	$126.90	per month
3"	$237.94	per month
4"	$396.57	per month
6"	$793.14	per month
8"	$1,586.28	per month

Monthly Minimum Sewer Charges

Monthly Wastewater Charge	$7.70	per EDU

Temporary Water Service

Meter Deposit Fee	$650.00	
Hydrant Meter Fee (Set/Remove Fee)	$140.00	one time fee
Hydrant Meter Fee (Relocate Fee)	$140.00	per occurrence
Minimum Monthly Service Charge	$72.73	per month
Estimated Water Consumption Deposit	$1,100.00	minimum

Repair, Replacement and Maintenance of Private Fire Hydrants (Monthly Charge)

Single/Double Outlet, All Sizes	$13.50	per month

Capacity Charges

Water	$5,360.00	per edu
Sewer	$3,880.00	per edu

ORD COMMUNITY
WATER & WASTEWATER SYSTEM
RATES, FEES and CHARGES
FY 2009 - 2010
Effective July 1, 2009

Water Consumption Charge

0 - 8 hcf	First Tier	2.06	per hcf
8 - 16 hcf	Second Tier	2.89	per hcf
16+ hcf	Third Tier	3.73	per hcf
	Monthly Capital Surcharge (New EDU)	20.00	per EDU
	Flat Rate	74.58	per unit

Monthly Minimum Water Charges

Size	Fee	
5/8" or 3/4"	$15.13	per month
1"	$37.81	per month
1 1/2"	$75.60	per month
2"	$120.96	per month
3"	$226.80	per month
4"	$378.00	per month
6"	$755.99	per month
8"	$1,511.99	per month

Monthly Minimum Sewer Charges

Monthly Wastewater Charge	$22.60	per EDU
Monthly Capital Surcharge (New EDU)	$5.00	per EDU

Temporary Water Service

Meter Deposit Fee	$650.00	
Hydrant Meter Fee (Set/Remove Fee)	$140.00	one time fee
Hydrant Meter Fee (Relocate Fee)	$140.00	per occurrence
Minimum Monthly Service Charge	$72.73	per month
Estimated Water Consumption Deposit	$1,100.00	minimum

Repair, Replacement and Maintenance of Private Fire Hydrants (Monthly Charge)

Single/Double Outlet, All Sizes	$13.50	per month

Capacity Charges

Water	$5,700.00	per edu
Sewer	$2,100.00	per edu

MARINA & ORD COMMUNITY
WATER & WASTEWATER SYSTEM
RATES, FEES and CHARGES
FY 2009 - 2010
Effective July 1, 2009

Labor Charges

District Engineer	$105.00 per hour
Capital Projects Manager	$85.00 per hour
Operations Engineer	$80.00 per hour
Projects Engineer	$68.00 per hour
Associate Engineer	$63.00 per hour
Engineering Administrative Assistant	$44.00 per hour
Operations & Maintenance Superintendant	$78.00 per hour
Operations & Maintenance System Operator 3	$60.00 per hour
Operations & Maintenance System Operator 2	$55.00 per hour
Operations & Maintenance System Operator 1	$50.00 per hour

Equipment Charges

Work Truck	$20.00 per hour
Backhoe Tractor	$30.00 per hour
Vactor Truck	$30.00 per hour
Dump Truck	$30.00 per hour
Ground Penetrating Radar Uit	$10.00 per hour

Miscellaneous Charges

Photocopy Charges	$0.10 per copy

Water Meter Installation Fee

(includes box and meter)

Size	Fee
5/8" or 3/4"	$350.00
1"	$400.00
1 1/2"	$450.00
2"	$700.00
3" or Larger	Actual direct and indirect cost to district. Advance payment to be based on estimated cost.

Other Fees and Charges

Preliminary Project Review Fee (large projects)	$500.00
Plan Review Fees:	
Existing Residential Modifications	$200.00 per unit plus additional fees
Existing Commercial Modifications	$400.00 per unit plus additional fees
Plan Review	$500.00 per unit plus additional fees
Water/Sewer Permit Fee	$30.00 each
Small Project Inspection Fee (single lot)	$400.00 per unit
Large Project Inspection Fee (large projects)	$500.00 per unit plus 3% of water & sewer construction cost
Building Modification/Addition Fee	$200.00 per unit
Deposit for a Meter Relocation	$200.00 deposit, plus actual costs
Mark and Locate Fee (USA Markings)	$100.00 first mark and locate at no-charge, each additional for $100
Backflow/Cross Connection Control Fee	$45.00 per device
Additional Backflow/Cross Connection Device	$30.00 per device
Deposit for New Account	$35.00 per edu
Meter Test Fee	$15.00 for 3/4" meter, actual cost for 1" and larger
Returned Check Fee	$15.00 per returned item
Basic Penalty	10% of the delinquent amount
Additional Penalty	1.50% per month of the delinquent amount

APPENDIX 12

FEES AND CHARGES WORKSHEET

MARINA COAST WATER DISTRICT
11 Reservation Road
Marina, CA 93933
(831) 384-6131

FEES AND CHARGES WORKSHEET

The following sections should be reviewed by the applicant to determine the approximate water and sewer fees and charges that are due prior to receiving water and sewer service. Final water and sewer fees and charges will be determined and paid prior to construction. For an explanation of all fees and charges, please reference the District Code. Fees shown are from the Fiscal Year 2007-2008 rate schedule. Use the current rate schedule when estimating project fees and charges.

A. Preliminary/Plan Check Fees/Review Plans

Existing Residential Modifications, $200 per unit*	For Applicant's Use
If you plan to modify an existing residential unit by adding water fixtures, please add the approved rate of $200.00 per residential unit in the box. * If plan review cost exceeds the base fee, the additional actual cost will also be charged.	

Existing Commercial Modifications, $400.00 per unit*	For Applicant's Use
If you plan to modify an existing commercial unit without adding square footage, but instead by adding fixtures or changing the use of an existing unit, please add the approved rate of $400.00 per unit in the box. * If plan review cost exceeds the base fee, the additional actual cost will also be charged.	

Plan Review, Small Project, $500.00 per unit*	For Applicant's Use
If you plan to construct a new residential or commercial structure, modify an existing residential unit by adding another structure or unit, or modify an existing commercial unit by adding square footage, please add the approved rate of $500.00 per unit in the box. * If plan review cost exceeds the base fee, the additional actual cost will also be charged.	

Plan Review, Large Project, $500.00 plus additional fees	For Applicant's Use
If you plan to construct a new residential or commercial subdivision or large commercial structure, please add the approved rate of $500.00 in the box. Additional fees will be assessed after developer master water and sewer plans or other maps and building plans are submitted for review.	

MARINA COAST WATER DISTRICT
11 Reservation Road
Marina, CA 93933
(831) 384-6131

B. Water/Sewer Permit Fee, $30 each

	For Applicant's Use
Apply for new water service, add $30 in the box.	
Apply for new sewer service, add $30 in the box.	

C. Water Connection Fee (Install Meter)

This fee covers all the costs of maintaining and replacing the meter and box for the life of the structure. Please add the appropriate fee for the meter size anticipated for your project. The final determination on the water meter size will be made after all plan review and fire department review is complete.

Meter Size:	Fee	For Applicant's Use
5/8" – ¾"	$350.00	
1"	$400.00	
1 ½"	$450.00	
2"	$700.00	
3" and larger	Actual direct and indirect costs to the District, advance payment to be based on estimated cost.	

D. Temporary Water Service Permit

These Deposits/Charges are for providing water from an approved fire hydrant location or the District's construction water depot. Please add the appropriate amount for your project.

		For Applicant's Use
Gate Valve/Meter Deposit	$650.00	
Water Consumption Deposit	$1100.00 (minimum)	
Set / remove hydrant meter (one time charge)	$140.00	
Relocate Meter, per occurrence	$140.00	
Meter set, other than on fire hydrant	Actual Costs	
Minimum monthly service charge	$65.00	
Monthly quantity rate per 100 cubic feet, Marina tiers	$1.79 per HCF, 0-12 HCF $2.80 per HCF, 12+ HCF	
Monthly quantity rate per 100 cubic feet, Ord Community tiers	$1.70 pr HCF, 0-8 HCF $2.39 per HCF, 8-16 HCF $3.08 per HCF, 16+ HCF	

*HCF = Hundred Cubic Feet = 748 gallons

MARINA COAST WATER DISTRICT
11 Reservation Road
Marina, CA 93933
(831) 384-6131

E. Construction Inspection Fee

Small Project, $400.00 per unit

	For Applicant's Use
If you plan to construct a new residential or commercial structure, modify an existing residential unit by adding another structure or unit or modify an existing commercial unit by adding square footage, please add the approved rate of $400.00 per unit in the box.	

Large Project, $500.00 per unit plus 3% of water and sewer construction costs, not less than actual construction inspection cost

	For Applicant's Use
If you plan to construct a new residential or commercial subdivision or large commercial structure, please add the approved rate of $500.00 per unit in the box. Additional fees will be assessed after developer construction costs are determined.	

F. Moving Meter Deposit, $200.00 plus actual cost

	For Applicant's Use
If you plan to relocate the existing meter, please add the approved deposit of $200.00 per move. Additional fees will be assessed after actual costs are determined.	

G. Water Capacity Charges

	For Applicant's Use
Use Worksheet 1-A to determine Water Capacity Charges.	

H. Sewer Capacity Charges

	For Applicant's Use
Use Worksheet 1-B to determine Sewer Capacity Charges	

TOTAL ESTIMATED WATER AND SEWER FEES AND CHARGES

	For Applicant's Use
Add all of the applicable fees and charges to determine your estimated total water and sewer connection cost.	

Worksheet 1-A:
Water Capacity Charge Worksheet

The information on this worksheet applies to non-residential projects. For non-residential projects, water use factors are assigned for different uses. For projects that propose two or more uses, calculate charges for each portion of the project. Where a proposed use may be designated as more than one category, the category which most accurately depicts the proposed non-residential use shall be selected. Where doubt exists, the higher intensity use category shall be chosen. Water use rates are assigned per unit-square footage, number of rooms, seats, etc. The assigned water use rates are determined considering estimated water use availability and fire flow availability for general commercial groups. Because of the many variables encountered, it is not possible to set absolute values for water use rates or estimate annual water use for all situations. Therefore, the estimated Assigned Water Use Factors are strictly for the purpose of determining water capacity charges. The type of use and assigned water use rates are listed below. The next sheet explains how to calculate your water capacity charge using the information on this sheet.

Type of Use	**Quantity**	**Basis**	**Assigned Water Use Rates (AFY/unit)**	**Assigned Water Use (AFY)**
Auto-Related	_____	sq. ft.	× 0.00007	= _____
Bar	_____	seats	× 0.024	= _____
Beauty shop/barber shop	_____	stations	× 0.059	= _____
Car wash w/recycle, use manufacturer data	_____	sq. ft	× *	= _____
Child care	_____	sq.ft.	× 0.0072	= _____
Commercial laundry	_____	washers	× 0.1735	= _____
Convenience stores	_____	sq. ft.	× 0.00017	= _____
Delicatessen (w/o seating)	_____	sq. ft.	× 0.00027	= _____
Dental offices	_____	sq. ft.	× 0.00029	= _____
Dry cleaners (no washer machines)	_____	sq. ft.	× 0.00040	= _____
Gas station	_____	pumps	× 0.1051	= _____
General retail	_____	sq. ft.	× 0.00005	= _____
General office	_____	sq. ft.	× 0.00012	= _____
Grocery and other Markets	_____	sq. ft.	× 0.00039	= _____
Hotel/motel/bed & breakfast	_____	units	× 0.17	= _____
Landscape (non-turf)	_____	acres	× 2.1	= _____
Landscape (turf)	_____	acres	× 2.5	= _____
Laundromat (self-serve)	_____	washers	× 0.202	= _____
Medical offices	_____	sq. ft	× 0.00018	= _____
Meeting halls, churches	_____	sq. ft.	× 0.0001	= _____
Nursing home	_____	rooms	× 0.142	= _____
Photographic Laboratory	_____	sq. ft.	× 0.003	= _____
Plant nursery	_____	sq. ft. land	× 0.00009	= _____
Public Restroom	_____	toilets	× 0.0676	= _____
Restaurant (incl. fast food, deli, sandwich shop)	_____	seats	× 0.029	= _____
Retail photo w/processing	_____	sq. ft.	× 0.00020	= _____
Swimming pool (per 100 sq. ft. pool surface area)	_____	100 sq ft	× 0.020	= _____
Theater	_____	seats	× 0.0014	= _____
Veterinary	_____	sq. ft.	× 0.00026	= _____
Warehouse, distribution, self-storage	_____	sq. ft.	× 0.00001	= _____
			TOTAL:	**= _____**

Worksheet 1-A (Continued)
HOW TO CALCULATE WATER CAPACITY CHARGES

STEP 1: DETERMINE WATER USE CATEGORY. Please determine the existing and proposed water use category as noted on the previous page. If this is a residential project, please go to Step 5.

Existing Business Use Category is _____.
Proposed Business Use Category is _____.

STEP 2: DETERMINE PROPOSED ASSIGNED WATER USE **{DEMAND}**. This step calculates the assigned water use for the proposed project. Assigned water use is the product of the basis or measurement and the water use rate. Use the assigned water use rates from the Worksheet 1-A. For projects with multiple uses, complete Worksheet 1-A and enter the total below. The Commercial Connection Form (Appendix 2) can also be used to calculate water demand.

Basis or Measurement _____**X** Water Use Rate _____ = _____Acre-Foot/Yr
(sq. ft., seats, stations, etc.) (see page 1)

STEP 3: DETERMINE EXISTING ASSIGNED WATER USE **{CREDIT}**. This step calculates the existing assigned water use, which is a credit to be applied to the total water capacity charge. The existing assigned water use is the product of the basis or measurement and the water use rate. Calculate as for Step 2. Please be prepared to provide a certification documenting existing use, upon request. New construction may skip this step, unless there has been a demolition on the site prior to permitting.

Basis or Measurement _____**X** Water Use Rate _____ = _____Acre-Foot/Yr
(sq. ft., seats, stations, etc.) (see page 1)

STEP 4: DETERMINE EQUIVALENT DWELLING UNITS: Subtract the **CREDIT** from the **DEMAND** to determine net increase in water demand. If there is no increase, then there is no water capacity charge for this project. If there is an increase, divide the difference by 0.33 AFY per Equivalent Dwelling Unit (EDU).

Net Increase in Demand _____AFY ÷ 0.33 AFY/EDU = _____ EDU

STEP 5: DETERMINE WATER CAPACITY CHARGE. Multiply the number of EDU by the water capacity charge for the service area. Residential Units are assessed as 1 EDU per dwelling unit.

No. of EDU _____**X** $_____/EDU = Water Capacity Charge or $_____.

*The FY 2007/2008 water capacity charge is $4,164 in Marina and $2,800 in the Ord Community.

STEP 6: TRANSFER INFORMATION TO THE FEES AND CHARGES WORKSHEET. Add the Step 5 water capacity charge to the Fees and Charges Worksheet, Box 'G'.

BOX G: Water Capacity Charge is $_____.

Worksheet 1-B:
Sewer Capacity Charge Worksheet

Residential Units

Each residential connection (single-family, multiple dwelling, condominium, trailer space, or mobile home) is one (1) EDU.

Nonresidential Units

Sewer collection system capacity charge is based on fixture units as defined in the Uniform Plumbing Code per structure (common fixture units are scheduled on the Commercial Connection Application at Appendix 2).

Fixture units are to be assigned based on ultimate plumbing fixtures per approved building plans, regardless of number of fixtures initially installed.

Each twenty (20) fixture units are equivalent to one (1) equivalent dwelling unit (EDU). For each hotel/motel unit a minimum of one (1) EDU per room will be applied.

The sewer collection system capacity charge is scaled at the ratio of one (1) EDU per each twenty (20) fixture units. For example, twenty-four (24) fixture units equals one point two (1.2) EDU's for a capacity fee of $1,200.00 when the capacity charge per EDU is $1000.00.

Each nonresidential connection is a minimum of one (1) EDU.

Worksheet 1-B Marina Sewer System (Continued)
HOW TO CALCULATE SEWER CAPACITY CHARGES

STEP 1: DETERMINE SEWER USE CATEGORY. Please determine the existing and proposed sewer use category as noted on the previous page.

Residential – Go to step 5.
Non-residential – Continue to step 2.

STEP 2: DETERMINE PROPOSED ASSIGNED SEWER USE **{DEMAND}**. This step calculates the proposed equivalent dwelling unit (EDU) for the proposed utilization of the space. The EDU is the sum of the proposed sewer fixture units divided by 20. The proposed number of fixture units can be determined from the Commercial Connection Form (Appendix 2). Minimum charge is 1 EDU.

Sum of Fixture Units _____ ÷ 20 Fixtures/EDU = _____ EDU
(Please see Commercial Connection Form and Permit Application for the sum of the fixture units)

STEP 3: DETERMINE EXISTING ASSIGNED SEWER USE **{CREDIT}**. This step calculates the existing sewer use, which is a credit to be applied to the total sewer capacity charge. Please be prepared to provide a certification documenting existing use, upon request. New construction may skip this step, unless there has been a demolition on the site prior to permitting. Minimum for existing is 1 EDU.

Sum of Fixture Units _____ ÷ 20 Fixtures/EDU = _____ EDU
(Please see Commercial Connection Form and Permit Application for the sum of the fixture units)

STEP 4: DETERMINE NET INCREASE IN SEWER DEMAND: Subtract the **CREDIT** from the **DEMAND** to determine net increase in sewer demand. If there is no increase, then there is no sewer capacity charge for this project. If there is an increase, proceed to step 5.

Net Increase in Demand _____ EDU

STEP 5: DETERMINE SEWER CAPACITY CHARGE: Multiply the number of EDU by the sewer capacity charge for the service area. Residential units are assessed as 1 EDU per dwelling unit.

No. of EDU _____ **X** $_____/EDU = Sewer Capacity Charge or $_____.

*The FY 2007/2008 sewer capacity charge is $1,485 in Marina and $1,000 in the Ord Community.

STEP 6: TRANSFER INFORMATION TO THE FEES AND CHARGES WORKSHEET. Add either Step 4 or Step 5 sewer capacity charge to the Fees and Charges Worksheet, Box 'H'.

BOX H: Sewer Capacity Charge is $_____.

APPENDIX 13

FEES AND CHARGES WORKSHEET EXAMPLES

EXAMPLE NO. 1, NEW RESIDENTIAL

EXAMPLE NO. 2, MODIFIED RESIDENTIAL

EXAMPLE NO. 3, ADD A DWELLING UNIT

EXAMPLE NO. 4, NEW COMMERICIAL

EXAMPLE NO. 5, MODIFIED COMMERICIAL

Example No. 1, New Residential

(Construct a 3 bedroom, 2 bath new home on a vacant lot.)

1. COMPLETE THE RESIDENTIAL CONNECTION FORM AND PERMIT APPLICATION

(See Attachment)

3 Bedroom
2 Full Bath (Sink, Bathtub, Toilet)
Kitchen (1 sink)
Laundry Room (1 washer machine)
2 Car Garage
3 Hosebibs
Located in the Ord Community service area

2. COMPLETE THE FEES AND CHARGES WORKSHEET

Box A.	Preliminary/Plan Check Fees (Plan Review)	$500.00
Box B.	Water/Sewer Permit Fee, $30.00 each	$60.00
Box C.	Water Connection Fee, (Install Meter) 1”	$400.00
Box E.	Construction Inspection Fee	$400.00
Box G.	Water Capacity Charges (Step 5 on How to Calculate Water Capacity Charges) No. of Residential Units 1 x $2,800= $2,800.00	$2,800.00
Box H.	Sewer Capacity Charges (Step 5 on How to Calculate Sewer Capacity Charges) No. of Residential Units 1 x $1,000.00=$1,000.00	$1,000.00
	Total Charges:	**$5,160.00**

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131
RESIDENTIAL CONNECTION FORM AND PERMIT APPLICATION

NOTE: When approved and signed by the jurisdiction, this form must be submitted with final and complete construction plans to the Marina Coast Water District permit office.

Completing the Residential Connection Form & Permit Application does not guarantee issuance of a permit.
ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

Property Owner: Mr. and Mrs.Example No. 1
Owner's Telephone Number: (831) 123-xxxx
Agent/Representative:
Agent's Telephone Number:
Property Address: 123 Example Ave, Marina, CA
Mailing Address (if different from property):
Assessor's Parcel Number
Project Type (Check One) X Single Family Residence, New Construction
SF Residence, Addition/Rennovation
Multi-Family Residence, New Construction
MF Residence, Addition/Rennovation
Water Meters Required (enter quantity): 1 Potable 0 Irrigation

NEW CONSTRUCTION SKIP TO TABLE 2.

TABLE NO. 1 - EXISTING PROPERTY FIXTURE COUNT (All fixtures before project.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0	0.0	0.0
Bathtub, Standard (may have shower head above)		4.0	2.0	0.0	0.0
Bidet		1.0	1.0	0.0	0.0
Clothes Washer		4.0	3.0	0.0	0.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher		1.5	2.0	0.0	0.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		1.0	1.0	0.0	0.0
Sink, Kitchen		1.5	2.0	0.0	0.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory (dual bath count as 1)		1.0	1.0	0.0	0.0
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)		2.5	3.0	0.0	0.0
Water Closet, HET (1.3 gal per flush or dual flush)		1.5	2.0	0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Hose Bibbs (1st Hose Bibb)		2.5	0	0.0	0.0
Hose Bibbs (each additional)		1.0	0	0.0	0.0
Lawn Sprinklers (each head)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Total Existing Water Fixture Units **0.0**
Total Existing Sewer Fixture Units **0.0**
Total Existing Dwelling Units

Property Address: 123 Example Ave, Marina, CA

TABLE NO. 2 - POST-PROJECT PROPERTY FIXTURE COUNT (All fixtures after project completion.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0	0.0	0.0
Bathtub, Standard (may have shower head above)	2	4.0	2.0	8.0	4.0
Bidet		1.0	1.0	0.0	0.0
Clothes Washer		4.0	3.0	0.0	0.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)	1	3.0	2.0	3.0	2.0
Dishwasher		1.5	2.0	0.0	0.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)	1	1.0	1.5	1.0	1.5
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		1.0	1.0	0.0	0.0
Sink, Kitchen	1	1.5	2.0	1.5	2.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory (dual bath count as 1)	2	1.0	1.0	2.0	2.0
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)		2.5	3.0	0.0	0.0
Water Closet, HET (1.3 gal per flush or dual flush)	2	1.5	2.0	3.0	4.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)	2	1.0	0	2.0	0.0
Lawn Sprinklers (each head)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Proposed Total Water Fixture Units		**23.0**	
Proposed Total Sewer Fixture Units			**15.5**
Proposed Total Dwelling Units	1		

In completing the Water Release Form, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures. If the fixture unit count changes without notification to the District, or if a difference in fixtures is documented upon official inspection, water permits for the property may be cancelled. In addition, water fixtures installed without a water permit may be cause for interruptions of the water service to the site, additional fees and penalties the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

I certify, under the penalty of perjury, that the information provided on the Water Release Form & Permit application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this property

Signature of Owner/Agent

Date

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received:

By:

Property Address: 123 Example Ave, Marina, CA

Fees and Capacity Charges Calculations **Svc Area:** Ord

Fees	**Fee Schedule**	**No. Units**	**Extension**
Preliminary Project Review Fee, New Residence	$ 500.00	1	$ 500.00
Preliminary Review Fee, Addition/Rennovation	$ 200.00	0	$ -
Additional Review Fees (actual cost)	$ -	1	$ -
Water Permit Fee	$ 30.00	1	$ 30.00
Sewer Permit Fee	$ 30.00	1	$ 30.00
Water Meter Installation Fee:	$ 400.00	1	$ 400.00
Water Capacity Charge (see EDU calcs below):	$ 2,800.00	1.00	$ 2,800.00
Sewer Capacity Charge (see EDU calcs below):	$ 1,000.00	1.00	$ 1,000.00
Constructino Inspection (single lot):	$ 400.00	1	$ 400.00
Construction Inspection (large project):	$ 500.00	0	$ -
Total			$ 5,160.00 *

Water /Sewer Equivalent Dwelling Units (EDU):

Proposed Total Dwelling Units:	1	
Existing Dwelling Units:	0	
Net Increase in Dwelling Units:	1	
Net EDU's Due:	1	If reducing EDU count, no charge

Water Meter Size: 1

Additional Review Fees:

Reviewer:	Hours:	Rate:	Subtotal:
District Engineer		$ 80.00	$ -
Capital Projects Manager		$ 65.00	$ -
Project Engineer		$ 55.00	$ -
Associate Engineer		$ 50.00	$ -
Consultant			$ -
Total			$ -

* Fee estimate not final until reviewed by MCWD staff.

Example No. 2, Modified Residential

(Add a bathroom to an existing 3 bedroom, 2 bath home.)

1. COMPLETE THE RESIDENTIAL CONNECTION FORM AND PERMIT APPLICATION
(See Attachment)

Existing Features:

3 Bedroom
2 Bath
2 Toilets
2 Sinks
Laundry Room
Washer/Dryer
Kitchen
Located in the Marina service area

Proposed Addition:

1 Toilet
1 Sink

2. COMPLETE THE FEES AND CHARGES WORKSHEET

Box A: Preliminary/Plan Check Fees $200.00
(Existing Residential Modification, no additional Dwelling Unit)

*****No changes anticipated for existing water and sewer lateral.***

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131
RESIDENTIAL CONNECTION FORM AND PERMIT APPLICATION

NOTE: When approved and signed by the jurisdiction, this form must be submitted with final and complete construction plans to the Marina Coast Water District permit office.

Completing the Residential Connection Form & Permit Application does not guarantee issuance of a permit.
ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

Property Owner: Mr. and Mrs.Example No. 2
Owner's Telephone Number: (831) 123-xxxx
Agent/Representative:
Agent's Telephone Number:
Property Address: 125 Example Drive, Marina, CA
Mailing Address (if different from property):
Assessor's Parcel Number
Project Type (Check One)
( ) Single Family Residence, New Construction
(X) SF Residence, Addition/Rennovation
( ) Multi-Family Residence, New Construction
( ) MF Residence, Addition/Rennovation
Water Meters Required (enter quantity): 0 Potable 0 Irrigation

NEW CONSTRUCTION SKIP TO TABLE 2.

TABLE NO. 1 - EXISTING PROPERTY FIXTURE COUNT (All fixtures before project.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0	0.0	0.0
Bathtub, Standard (may have shower head above)	2	4.0	2.0	8.0	4.0
Bidet		1.0	1.0	0.0	0.0
Clothes Washer	1	4.0	3.0	4.0	3.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher	1	1.5	2.0	1.5	2.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		1.0	1.0	0.0	0.0
Sink, Kitchen	1	1.5	2.0	1.5	2.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory (dual bath count as 1)	2	1.0	1.0	2.0	2.0
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)	2	2.5	3.0	5.0	6.0
Water Closet, HET (1.3 gal per flush or dual flush)		1.5	2.0	0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)	2	1.0	0	2.0	0.0
Lawn Sprinklers (each head)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Total Existing Water Fixture Units **26.5**
Total Existing Sewer Fixture Units **19.0**
Total Existing Dwelling Units 1

Property Address: 125 Example Drive, Marina, CA

TABLE NO. 2 - POST-PROJECT PROPERTY FIXTURE COUNT (All fixtures after project completion.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0	0.0	0.0
Bathtub, Standard (may have shower head above)	2	4.0	2.0	8.0	4.0
Bidet		1.0	1.0	0.0	0.0
Clothes Washer	1	4.0	3.0	4.0	3.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher	1	1.5	2.0	1.5	2.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		1.0	1.0	0.0	0.0
Sink, Kitchen	1	1.5	2.0	1.5	2.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory (dual bath count as 1)	3	1.0	1.0	3.0	3.0
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)	2	2.5	3.0	5.0	6.0
Water Closet, HET (1.3 gal per flush or dual flush)	1	1.5	2.0	1.5	2.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)	2	1.0	0	2.0	0.0
Lawn Sprinklers (each head)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Proposed Total Water Fixture Units		**29.0**	
Proposed Total Sewer Fixture Units			**22.0**
Proposed Total Dwelling Units	1		

In completing the Water Release Form, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures. If the fixture unit count changes without notification to the District, or if a difference in fixtures is documented upon official inspection, water permits for the property may be cancelled. In addition, water fixtures installed without a water permit may be cause for interruptions of the water service to the site, additional fees and penalties the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

I certify, under the penalty of perjury, that the information provided on the Water Release Form & Permit application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this property

Signature of Owner/Agent _____ Date _____

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received: _____ By: _____

Property Address: 125 Example Drive, Marina, CA

Fees and Capacity Charges Calculations **Svc Area:** Marina

Fees	**Fee Schedule**	**No. Units**	**Extension**
Preliminary Project Review Fee, New Residence	$ 500.00	0	$ -
Preliminary Review Fee, Addition/Rennovation	$ 200.00	1	$ 200.00
Additional Review Fees (actual cost)	$ -	1	$ -
Water Permit Fee	$ 30.00	0	$ -
Sewer Permit Fee	$ 30.00	0	$ -
Water Meter Installation Fee:	$ 350.00	0	$ -
Water Capacity Charge (see EDU calcs below):	$ 4,164.00	0.00	$ -
Sewer Capacity Charge (see EDU calcs below):	$ 1,485.00	0.00	$ -
Constructino Inspection (single lot):	$ 400.00	0	$ -
Construction Inspection (large project):	$ 500.00	0	$ -
Total			$ 200.00 *

Water /Sewer Equivalent Dwelling Units (EDU):

Proposed Total Dwelling Units:	1	
Existing Dwelling Units:	1	
Net Increase in Dwelling Units:	0	
Net EDU's Due:	0	If reducing EDU count, no charge

Water Meter Size: 0.75

Additional Review Fees:

Reviewer:	Hours:	Rate:	Subtotal:
District Engineer		$ 80.00	$ -
Capital Projects Manager		$ 65.00	$ -
Project Engineer		$ 55.00	$ -
Associate Engineer		$ 50.00	$ -
Consultant			$ -
Total			$ -

* Fee estimate not final until reviewed by MCWD staff.

Example No. 3, Add A Dwelling Unit

(Add a carriage unit apartment to an existing 3 bedroom, 2 bath home.)

3. COMPLETE THE RESIDENTIAL CONNECTION FORM AND PERMIT APPLICATION (See Attachment)

Existing Features:

3 Bedroom
2 Bath
2 Toilets
2 Sinks
Laundry Room
Washer/Dryer
Kitchen
Located in the Marina service area

Proposed Addition:

1 Toilet
1 Sink
1 Shower
1 Kitchen Sink

4. COMPLETE THE FEES AND CHARGES WORKSHEET

Box A.	Preliminary/Plan Check Fees (Plan Review)	$500.00
Box B.	Water/Sewer Permit Fee, $30.00 each	$60.00
Box C.	Water Connection Fee, (Install Meter) ¾"	$350.00
Box E.	Construction Inspection Fee	$400.00
Box G.	Water Capacity Charges (Step 5 on How to Calculate Water Capacity Charges) No. of Residential Units 1 x $4,164.00= $4,164.00	$4,164.00
Box H.	Sewer Capacity Charges (Step 5 on How to Calculate Sewer Capacity Charges) No. of Residential Units 1 x $1,485.00=$1,485.00	$1,000.00
	Total Charges:	**$6,959.00**

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131
RESIDENTIAL CONNECTION FORM AND PERMIT APPLICATION

NOTE: When approved and signed by the jurisdiction, this form must be submitted with final and complete construction plans to the Marina Coast Water District permit office.

Completing the Residential Connection Form & Permit Application does not guarantee issuance of a permit.
ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

Property Owner: Mr. and Mrs.Example No. 3
Owner's Telephone Number: (831) 123-xxxx
Agent/Representative:
Agent's Telephone Number:
Property Address: 127 Example Way, Marina, CA
Mailing Address (if different from property):
Assessor's Parcel Number
Project Type (Check One)
_ Single Family Residence, New Construction
_ SF Residence, Addition/Rennovation
_ Multi-Family Residence, New Construction
X MF Residence, Addition/Rennovation
Water Meters Required (enter quantity): 1 Potable 0 Irrigation

NEW CONSTRUCTION SKIP TO TABLE 2.

TABLE NO. 1 - EXISTING PROPERTY FIXTURE COUNT (All fixtures before project.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0	0.0	0.0
Bathtub, Standard (may have shower head above)	2	4.0	2.0	8.0	4.0
Bidet		1.0	1.0	0.0	0.0
Clothes Washer	1	4.0	3.0	4.0	3.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher	1	1.5	2.0	1.5	2.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		1.0	1.0	0.0	0.0
Sink, Kitchen	1	1.5	2.0	1.5	2.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory (dual bath count as 1)	2	1.0	1.0	2.0	2.0
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)	2	2.5	3.0	5.0	6.0
Water Closet, HET (1.3 gal per flush or dual flush)		1.5	2.0	0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)	2	1.0	0	2.0	0.0
Lawn Sprinklers (each head)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Total Existing Water Fixture Units **26.5**
Total Existing Sewer Fixture Units **19.0**
Total Existing Dwelling Units 1

Property Address: 127 Example Way, Marina, CA

TABLE NO. 2 - POST-PROJECT PROPERTY FIXTURE COUNT (All fixtures after project completion.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Large (over 55 gallon capacity)		4.0	3.0	0.0	0.0
Bathtub, Standard (may have shower head above)	2	4.0	2.0	8.0	4.0
Bidet		1.0	1.0	0.0	0.0
Clothes Washer	1	4.0	3.0	4.0	3.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher	1	1.5	2.0	1.5	2.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)	1	2.0	2.0	2.0	2.0
Sink, Bar		1.0	1.0	0.0	0.0
Sink, Kitchen	2	1.5	2.0	3.0	4.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory (dual bath count as 1)	3	1.0	1.0	3.0	3.0
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		3.0	4.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)	2	2.5	3.0	5.0	6.0
Water Closet, HET (1.3 gal per flush or dual flush)	1	1.5	2.0	1.5	2.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)	2	1.0	0	2.0	0.0
Lawn Sprinklers (each head)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Proposed Total Water Fixture Units		**32.5**	
Proposed Total Sewer Fixture Units			**26.0**
Proposed Total Dwelling Units	2		

In completing the Water Release Form, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures. If the fixture unit count changes without notification to the District, or if a difference in fixtures is documented upon official inspection, water permits for the property may be cancelled. In addition, water fixtures installed without a water permit may be cause for interruptions of the water service to the site, additional fees and penalties the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

I certify, under the penalty of perjury, that the information provided on the Water Release Form & Permit application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this property

Signature of Owner/Agent _____ Date _____

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received: _____ By: _____

Property Address: 127 Example Way, Marina, CA

Fees and Capacity Charges Calculations **Svc Area:** Marina

Fees	**Fee Schedule**	**No. Units**	**Extension**
Preliminary Project Review Fee, New Residence	$ 500.00	1	$ 500.00
Preliminary Review Fee, Addition/Rennovation	$ 200.00	0	$ -
Additional Review Fees (actual cost)	$ -	1	$ -
Water Permit Fee	$ 30.00	1	$ 30.00
Sewer Permit Fee	$ 30.00	1	$ 30.00
Water Meter Installation Fee:	$ 350.00	1	$ 350.00
Water Capacity Charge (see EDU calcs below):	$ 4,164.00	1.00	$ 4,164.00
Sewer Capacity Charge (see EDU calcs below):	$ 1,485.00	1.00	$ 1,485.00
Constructino Inspection (single lot):	$ 400.00	1	$ 400.00
Construction Inspection (large project):	$ 500.00	0	$ -
Total			$ 6,959.00 *

Water /Sewer Equivalent Dwelling Units (EDU):

Proposed Total Dwelling Units:	2	
Existing Dwelling Units:	1	
Net Increase in Dwelling Units:	1	
Net EDU's Due:	1	If reducing EDU count, no charge

Water Meter Size: 0.75

Additional Review Fees:

Reviewer:	Hours:	Rate:	Subtotal:
District Engineer		$ 80.00	$ -
Capital Projects Manager		$ 65.00	$ -
Project Engineer		$ 55.00	$ -
Associate Engineer		$ 50.00	$ -
Consultant			$ -
Total			$ -

* Fee estimate not final until reviewed by MCWD staff.

Example No. 4, New Commercial

(Construct a new fast food restaurant on a vacant lot.)

1. COMPLETE THE COMMERCIAL CONNECTION FORM AND PERMIT APPLICATION (See Attachment)

100 Seats
2 Public Restrooms
2 Kitchen Sinks
2 Dishwashers
4 Stoves/Ovens
1 Commercial Sink
2 Walk in Freezers
2 Refrigerators
4 Deep Fryer Vats
Located in the Ord Community service area

2. COMPLETE THE FEES AND CHARGES WORKSHEET

Box A.	Preliminary/Plan Check Fees (Plan Review)	$500.00
Box B.	Water/Sewer Permit Fee, $30.00 each	$60.00
Box C.	Water Connection Fee, (Install Meter) 2 ea 1”	$800.00
Box E.	Construction Inspection Fee	$500.00

Box G. Water Capacity Charges

Step 1	Restaurant	
Step 2	Basis 100 x 0.029 AFY/seat = 2.9 AFY	
	500 SF Landscape x 2.1 AFY/ac = 0.02 AFY	
Step 3	New construction = 0 AFY credit	
Step 4	2.92 AFY ÷ 0.33 AFY/EDU = 8.9 EDU	
Step 5	8.9 EDU x $2,800 =	$24,811.00

Box J Sewer Capacity Charges

Step 1	Restaurant	
Step 2	24.5 Fixture Units ÷ 20 Fixtures/EDU = 1.23 EDU	
Step 3	New construction = 0 EDU credit	
Step 4	Net Increase in Demand = 1.23 – 0.0 = 1.23 EDU	
Step 5	1.23 EDU x $1,000 =	$1,225.00

Total Charges: $27,896.00

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131
COMMERCIAL CONNECTION FORM AND PERMIT APPLICATION

Completing the Commercial Connection Form & Permit Application does not guarantee issuance of a permit.
ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

1. OWNERSHIP INFORMATION

Property Owner: Business Owner No. 4
Owner's Telephone Number: (831) 456-xxxx
Mailing Address: 345 Anywhere Street, Marina CA

2. AGENT/REPRESENTATIVE INFORMATION

Agent/Representative:
Agent's Telephone Number:
Mailing Address:

3. PROPERTY INFORMATION

Property Address: 345 Someplace Parkway, Marina CA

Assessor's Parcel Number
Project Type (Check One) X New Construction
Rennovation of Existing Property
New business in existing building, no rennovation
Water Meters Required (enter quantity): 1 Potable 1 Irrigation

4. BUSINESS INFORMATION (used to calculate capacity charges)

Item	Proposed		Previous		Change
List Business Type	Restaurant		For new const, leave blank		
No. of Employees	20				20
Auto repair shops		sq. ft.		sq. ft.	0
Bar		seats		seats	0
Beauty shop/barber shop		stations		stations	0
Car wash w/recycle		sq. ft.		sq. ft.	0
Child Care		sq. ft.		sq. ft.	0
Commercial laundry		washers		washers	0
Delicatessen (w/o seating)		sq. ft.		sq. ft.	0
Dental offices		sq. ft.		sq. ft.	0
Dry Cleaners (no washer machines)		sq. ft.		sq. ft.	0
Gas station		pumps		pumps	0
General retail		sq. ft.		sq. ft.	0
General office		sq. ft.		sq. ft.	0
Grocery and other Markets		sq. ft.		sq. ft.	0
Hotel/motel/bed & breakfast		units		units	0
Laundromat (self-serve)		washers		washers	0
Medical offices		sq. ft.		sq. ft.	0
Meeting halls, churches		sq. ft.		sq. ft.	0
Nursing home		rooms		rooms	0
Photographic lab		sq. ft.		sq. ft.	0
Plant nursery		sq. ft. land		sq. ft. land	0
Public restroom		toilets		toilets	0
Restaurant (incl. fast food, deli, sandwich shop)	100	seats		seats	100
Retail photo w/processing		sq. ft.		sq. ft.	0
Swimming pool (per 100 sq. ft. pool surface area)		100 sf		100 sf	0
Theater		seats		seats	0
Veterinary		sq. ft.		sq. ft.	0
Warehouse, distribution, self-storage		sq. ft.		sq. ft.	0

continued on next page

Property Address: 345 Someplace Parkway, Marina CA

4. BUSINESS INFORMATION (continued)

Exterior Irrigation

Item	Proposed		Previous		Change
Landscape (non-turf)	500	sq. ft.		sq. ft.	500
Landscape (turf)	0	sq. ft.		sq. ft.	0

NEW CONSTRUCTION SKIP TO TABLE 2.

TABLE NO. 1 - EXISTING PROPERTY FIXTURE COUNT (All fixtures before project.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Standard (may have shower head above)		4.0	2.0	0.0	0.0
Clothes Washer		4.0	3.0	0.0	0.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher		1.5	2.0	0.0	0.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Drinking Fountain / Water Cooler		0.5	0.5	0.0	0.0
Floor Drain		0.0	3.0	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		2.0	2.0	0.0	0.0
Sink, Commercial sink (Service/Mop)		3.0	3.0	0.0	0.0
Sink, Kitchen		1.5	2.0	0.0	0.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory		1.0	1.0	0.0	0.0
Urinal, flushometer (1.0 gal per flush)		2.0	2.0	0.0	0.0
Urinal, waterless		0.0	0.5	0.0	0.0
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		5.5	6.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)		2.5	4.0	0.0	0.0
Water Closet, HET (1.3 gal per flush or dual flush)		1.5	3.0	0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Drinking Fountain		0.5	0	0.0	0.0
Hose Bibbs (1st Hose Bibb)		2.5	0	0.0	0.0
Hose Bibbs (each additional)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Total Existing Water Fixture Units	**0.0**	
Total Existing Sewer Fixture Units		**0.0**

Property Address: 345 Someplace Parkway, Marina CA

TABLE NO. 2 - POST-PROJECT PROPERTY FIXTURE COUNT (All fixtures <u>after</u> project completion.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Standard (may have shower head above)		4.0	2.0	0.0	0.0
Clothes Washer		4.0	3.0	0.0	0.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher	2	1.5	2.0	3.0	4.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Drinking Fountain / Water Cooler		0.5	0.5	0.0	0.0
Floor Drain		0.0	3.0	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		2.0	2.0	0.0	0.0
Sink, Commercial sink (Service/Mop)	1	3.0	3.0	3.0	3.0
Sink, Kitchen	2	1.5	2.0	3.0	4.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory	4	1.0	1.0	4.0	4.0
Urinal, flushometer (1.0 gal per flush)		2.0	2.0	0.0	0.0
Urinal, waterless	1	0.0	0.5	0.0	0.5
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		5.5	6.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)		2.5	4.0	0.0	0.0
Water Closet, HET (1.3 gal per flush or dual flush)	3	1.5	3.0	4.5	9.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Drinking Fountain	1	0.5	0	0.5	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Proposed Total Water Fixture Units	**20.5**	
Proposed Total Sewer Fixture Units		**24.5**

In completing the Commercial Connection Form and Permit Application, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures. If the fixture unit count changes or business type changes without notification to the District, or if a difference in fixtures or business type is documented upon official inspection, water permits for the property may be cancelled. In addition, if water fixtures are installed or a change of business type occurs without a water permit, then this may be cause for interruptions of the water service to the site, additional fees and penalties, the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

I certify, under the penalty of perjury, that the information provided on the Commercial Connection Form and Permit Application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this property.

Signature of Owner/Agent _____ Date _____

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received: _____ By: _____

Property Address: 345 Someplace Parkway, Marina CA

Fees and Capacity Charges Calculations **Svc Area:** Ord

Fees	**Fee Schedule**	**No. Units**	**Extension**	
Preliminary Project Review Fee, New Construction	$ 500.00	1	$ 500.00	
Preliminary Review Fee, Comm. Modifications	$ 400.00	0	$ -	
Additional Review Fees (actual cost)	$ -	1	$ -	
Water Permit Fee	$ 30.00	1	$ 30.00	
Sewer Permit Fee	$ 30.00	1	$ 30.00	
Potable Water Meter Installation Fee:	$ 400.00	1	$ 400.00	
Irrigation Meter Installation Fee:	$ 400.00	1	$ 400.00	
Interior Water Capacity Charge (see EDU calcs):	$ 2,800.00	8.79	$ 24,606.00	
Exterior Water Capacity Charge (see EDU calcs):	$ 2,800.00	0.07	$ 205.00	
Sewer Capacity Charge (see EDU calcs below):	$ 1,000.00	1.23	$ 1,225.00	
Construction Inspection (single lot):	$ 400.00	0	$ -	
Construction Inspection (large project):	$ 500.00	1	$ 500.00	
Total			$ 27,896.00	*

Interior Water Equivalent Dwelling Units (EDU):

Proposed Total Water Demand:	2.9	AFY
Existing Water Demand:	0.0	AFY
Net Increase in Demand:	2.9	AFY
Water EDUs @ 0.33 AFY per EDU:	8.8	
Previous EDUs Paid:	0.0	
Net EDU's Due:	8.8	

Exterior Water Equivalent Dwelling Units (EDU):

Proposed Total Water Demand:	0.02	AFY
Existing Water Demand:	0.00	AFY
Net Increase in Demand:	0.02	AFY
Water EDUs @ 0.33 AFY per EDU:	0.1	
Previous EDUs Paid:	0.0	
Net EDU's Due:	0.1	

Sewer Equivalent Dwelling Units (EDU):

Proposed Total Sewer Fixture Units:	24.5	
Existing Sewer Fixture Units:	0.0	
Net Increase in Fixture Units:	24.5	
Sewer EDUs @ 20 FU per EDU (min 1):	1.23	Hotel/motel use 1 EDU/room
Previous EDUs Paid:	0.00	
Net EDU's Due:	1.2	

Potable Water Meter Size: 1

Irrigtion Water Meter Size: 1

	Size:	Quantity:	Size:	Quantity:
Backflow Devices:				
Potable:				
Irrigation:				

Additional Review Fees:

Reviewer:	Hours:	Rate:	Subtotal:
District Engineer		$ 80.00	$ -
Capital Projects Manager		$ 65.00	$ -
Project Engineer		$ 55.00	$ -
Associate Engineer		$ 50.00	$ -
Consultant			$ -
Total			$ -

Example No. 5, Modified Commercial

(Modify an existing fast food restaurant by adding 25 extra seats.)

1. COMPLETE THE COMMERCIAL CONNECTION FORM AND PERMIT APPLICATION (See Attachment)

Existing Features

100 Seats
2 public Restroom
2 Kitchen Sinks
2 Dishwashers
4 Stoves/Ovens
1 Commercial Sink
2 Walk in Freezers
4 Deep Fryer Vats
Located in the Marina service area

Proposed Addition

25 Seats

2. COMPLETE THE FEES AND CHARGES WORKSHEET

Box A. Preliminary/Plan Check Fees (Plan Review) $400.00

Box E. Construction Inspection Fee $400.00

Box G. Water Capacity Charges

Step 1	Restaurant	
Step 2	Basis 125 x 0.029 AFY/seat = 3.6 AFY	
	500 SF Landscape x 2.1 AFY/ac = 0.02 AFY	
Step 3	Basis 100 x 0.029 AFY/seat = 2.9 AFY	
	500 SF Landscape x 2.1 AFY/ac = 0.02 AFY	
Step 4	0.7 AFY ÷ 0.33 AFY/EDU = 2.2 EDU	
Step 5	2.2 EDU x $4,164 =	$9,148.00

Box J Sewer Capacity Charges

Step 1	Restaurant	
Step 2	24.5 Fixture Units ÷ 20 Fixtures/EDU = 1.23 EDU	
Step 3	24.5 Fixture Units ÷ 20 Fixtures/EDU = 1.23 EDU	
Step 4	Net Increase in Demand = 1.23 – 1.23 = 0.0 EDU	
Step 5	1.23 EDU x $1,000 =	$0.00

Total Charges: $9,948.00

MARINA COAST WATER DISTRICT
11 Reservation Road, Marina CA 93933 (831) 384-6131
COMMERCIAL CONNECTION FORM AND PERMIT APPLICATION

Completing the Commercial Connection Form & Permit Application does not guarantee issuance of a permit.
ALL SPACES BELOW MUST BE COMPLETED OR THE APPLICATION MAY NOT BE PROCESSED.
(Please print clearly.)

1. OWNERSHIP INFORMATION

Property Owner: Business Owner No. 5
Owner's Telephone Number: (831) 456-xxxx
Mailing Address: 456 Anywhere Street, Marina CA

2. AGENT/REPRESENTATIVE INFORMATION

Agent/Representative:
Agent's Telephone Number:
Mailing Address:

3. PROPERTY INFORMATION

Property Address: 456 Someother Parkway, Marina CA

Assessor's Parcel Number
Project Type (Check One) _____ New Construction
X Rennovation of Existing Property
_____ New business in existing building, no rennovation
Water Meters Required (enter quantity): 0 Potable 0 Irrigation

4. BUSINESS INFORMATION (used to calculate capacity charges)

Item	Proposed		Previous		Change
List Business Type	Restaurant		For new const, leave blank		
No. of Employees	20		20		0
Auto repair shops		sq. ft.		sq. ft.	0
Bar		seats		seats	0
Beauty shop/barber shop		stations		stations	0
Car wash w/recycle		sq. ft.		sq. ft.	0
Child Care		sq. ft.		sq. ft.	0
Commercial laundry		washers		washers	0
Delicatessen (w/o seating)		sq. ft.		sq. ft.	0
Dental offices		sq. ft.		sq. ft.	0
Dry Cleaners (no washer machines)		sq. ft.		sq. ft.	0
Gas station		pumps		pumps	0
General retail		sq. ft.		sq. ft.	0
General office		sq. ft.		sq. ft.	0
Grocery and other Markets		sq. ft.		sq. ft.	0
Hotel/motel/bed & breakfast		units		units	0
Laundromat (self-serve)		washers		washers	0
Medical offices		sq. ft.		sq. ft.	0
Meeting halls, churches		sq. ft.		sq. ft.	0
Nursing home		rooms		rooms	0
Photographic lab		sq. ft.		sq. ft.	0
Plant nursery		sq. ft. land		sq. ft. land	0
Public restroom		toilets		toilets	0
Restaurant (incl. fast food, deli, sandwich shop)	125	seats	100	seats	25
Retail photo w/processing		sq. ft.		sq. ft.	0
Swimming pool (per 100 sq. ft. pool surface area)		100 sf		100 sf	0
Theater		seats		seats	0
Veterinary		sq. ft.		sq. ft.	0
Warehouse, distribution, self-storage		sq. ft.		sq. ft.	0

continued on next page

Property Address: 456 Someother Parkway, Marina CA

4. BUSINESS INFORMATION (continued)

Exterior Irrigation

Item	Proposed		Previous		Change
Landscape (non-turf)	500	sq. ft.	500	sq. ft.	0
Landscape (turf)	0	sq. ft.	0	sq. ft.	0

NEW CONSTRUCTION SKIP TO TABLE 2.

TABLE NO. 1 - EXISTING PROPERTY FIXTURE COUNT (All fixtures before project.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Standard (may have shower head above)		4.0	2.0	0.0	0.0
Clothes Washer		4.0	3.0	0.0	0.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher	2	1.5	2.0	3.0	4.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Drinking Fountain / Water Cooler		0.5	0.5	0.0	0.0
Floor Drain		0.0	3.0	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		2.0	2.0	0.0	0.0
Sink, Commercial sink (Service/Mop)	1	3.0	3.0	3.0	3.0
Sink, Kitchen	2	1.5	2.0	3.0	4.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory	4	1.0	1.0	4.0	4.0
Urinal, flushometer (1.0 gal per flush)		2.0	2.0	0.0	0.0
Urinal, waterless	1	0.0	0.5	0.0	0.5
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		5.5	6.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)		2.5	4.0	0.0	0.0
Water Closet, HET (1.3 gal per flush or dual flush)	3	1.5	3.0	4.5	9.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Drinking Fountain	1	0.5	0	0.5	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Total Existing Water Fixture Units	**20.5**	
Total Existing Sewer Fixture Units		**24.5**

Property Address: 456 Someother Parkway, Marina CA

TABLE NO. 2 - POST-PROJECT PROPERTY FIXTURE COUNT (All fixtures <u>after</u> project completion.)

TYPE OF FIXTURE	No. Fixtures	Fixture Units per Water	Fixture Units per Sewer	Total Fixture Units Water	Total Fixture Units Sewer
Indoor Fixtures					
Bathtub, Standard (may have shower head above)		4.0	2.0	0.0	0.0
Clothes Washer		4.0	3.0	0.0	0.0
Clothes Washer, ULF (maximum 18 gallons per cycle)		2.0	1.5	0.0	0.0
Clothes Washer, ULF (maximum 28 gallons per cycle)		3.0	2.0	0.0	0.0
Dishwasher	2	1.5	2.0	3.0	4.0
Dishwasher, ULF (maximum 7.66 gallons per cycle)		1.0	1.5	0.0	0.0
Drinking Fountain / Water Cooler		0.5	0.5	0.0	0.0
Floor Drain		0.0	3.0	0.0	0.0
Shower (each additional showerhead)		2.0	1.0	0.0	0.0
Shower, separate stall (one head)		2.0	2.0	0.0	0.0
Sink, Bar		2.0	2.0	0.0	0.0
Sink, Commercial sink (Service/Mop)	1	3.0	3.0	3.0	3.0
Sink, Kitchen	2	1.5	2.0	3.0	4.0
Sink, Laundry		1.5	2.0	0.0	0.0
Sink, Wash basin/Lavatory	4	1.0	1.0	4.0	4.0
Urinal, flushometer (1.0 gal per flush)		2.0	2.0	0.0	0.0
Urinal, waterless	1	0.0	0.5	0.0	0.5
Water Closet (toilet, pre-1993, over 1.6 gal per flush)		5.5	6.0	0.0	0.0
Water Closet, ULF (1.6 gal per flush)		2.5	4.0	0.0	0.0
Water Closet, HET (1.3 gal per flush or dual flush)	3	1.5	3.0	4.5	9.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Other (specify)				0.0	0.0
Outdoor Fixtures					
Decorative fountain (built in fixtures only)		1.0	0	0.0	0.0
Drinking Fountain	1	0.5	0	0.5	0.0
Hose Bibbs (1st Hose Bibb)	1	2.5	0	2.5	0.0
Hose Bibbs (each additional)		1.0	0	0.0	0.0
Outdoor spa/Jacuzzi (built in fixtures only)		2.0	0	0.0	0.0
Swimming pool (ea. 100 sq. ft. of pool surface)		1.0	0	0.0	0.0

Proposed Total Water Fixture Units **20.5**

Proposed Total Sewer Fixture Units **24.5**

In completing the Commercial Connection Form and Permit Application, the undersigned acknowledges that any discrepancy or mistake may cause rejection or delay in processing the application. Additionally, the undersigned is responsible for accurately accounting for all water fixtures. If the fixture unit count changes or business type changes without notification to the District, or if a difference in fixtures or business type is documented upon official inspection, water permits for the property may be cancelled. In addition, if water fixtures are installed or a change of business type occurs without a water permit, then this may be cause for interruptions of the water service to the site, additional fees and penalties, the imposition of a lien on the property, and deduction from the local jurisdiction's allocation.

I certify, under the penalty of perjury, that the information provided on the Commercial Connection Form and Permit Application is to my knowledge correct, and the information accurately reflects the changes affecting water presently planned for this prop

Signature of Owner/Agent Date

This form expires on the same date as any discretionary or building permits issued for this project by the city or county expire.

For MCWD only:

Date Received: By:

Property Address: 456 Someother Parkway, Marina CA

Fees and Capacity Charges Calculations **Svc Area:** Marina

Fees	**Fee Schedule**	**No. Units**	**Extension**
Preliminary Project Review Fee, New Construction	$ 500.00	0	$ -
Preliminary Review Fee, Comm. Modifications	$ 400.00	1	$ 400.00
Additional Review Fees (actual cost)	$ -	1	$ -
Water Permit Fee	$ 30.00	0	$ -
Sewer Permit Fee	$ 30.00	0	$ -
Potable Water Meter Installation Fee:	$ 400.00	0	$ -
Irrigation Meter Installation Fee:	$ 400.00	0	$ -
Interior Water Capacity Charge (see EDU calcs):	$ 4,164.00	2.20	$ 9,148.00
Exterior Water Capacity Charge (see EDU calcs):	$ 4,164.00	0.00	$ -
Sewer Capacity Charge (see EDU calcs below):	$ 1,485.00	0.00	$ -
Construction Inspection (single lot):	$ 400.00	1	$ 400.00
Construction Inspection (large project):	$ 500.00	0	$ -
Total			$ 9,948.00 *

Interior Water Equivalent Dwelling Units (EDU):

Proposed Total Water Demand:		3.6 AFY
Existing Water Demand:		2.9 AFY
Net Increase in Demand:		0.7 AFY
Water EDUs @ 0.33 AFY per EDU:	11.0	
Previous EDUs Paid:	8.8	
Net EDU's Due:	2.2	

Exterior Water Equivalent Dwelling Units (EDU):

Proposed Total Water Demand:		0.02 AFY
Existing Water Demand:		0.02 AFY
Net Increase in Demand:		0.0 AFY
Water EDUs @ 0.33 AFY per EDU:	0.1	
Previous EDUs Paid:	0.1	
Net EDU's Due:	0.0	

Sewer Equivalent Dwelling Units (EDU):

Proposed Total Sewer Fixture Units:		24.5
Existing Sewer Fixture Units:		24.5
Net Increase in Fixture Units:		0.0
Sewer EDUs @ 20 FU per EDU (min 1):	1.23	Hotel/motel use 1 EDU/room
Previous EDUs Paid:	1.23	
Net EDU's Due:	0.0	

Potable Water Meter Size: 1

Irrigtion Water Meter Size: 1

	Size:	Quantity:	Size:	Quantity:
Backflow Devices:				
Potable:				
Irrigation:				

Additional Review Fees:

Reviewer:	Hours:	Rate:	Subtotal:
District Engineer		$ 80.00	$ -
Capital Projects Manager		$ 65.00	$ -
Project Engineer		$ 55.00	$ -
Associate Engineer		$ 50.00	$ -
Consultant			$ -
Total			$ -

APPENDIX 14

TEMPORARY WATER SERVICE APPLICATION

TEMPORARY SERVICE APPLICATION (HYDRANT METERS)

Order Taken By: _____ Account No: _____

Date: _____ Work Order No.: _____

TYPE (Please check one) □ New Service □ Exchange Meter □ Relocate Meter □ Discontinue Service

BILLING DATA

SERVICE ADDRESS (Where meter will be used and project area)

_____

Street No. Street Name City Zip

NAME OF APPLICANT

_____ ( ) _____

Telephone Number

BILLING ADDRESS

_____

Street No. Street Name City Zip

PURPOSE OF USE (Confirm with signature)

1. I certify that the use of this hydrant meter is for an air gap equipped water truck only. There will be no exceptions such as temporary hose connections, etc.

_____

Signature of applicant

2. I certify that the use of this hydrant meter is for mixed use to include water trucks, hose connections, etc., and will provide the appropriate backflow prevention device.

_____

Signature of applicant

CROSS CONNECTION SPECIALIST REVIEW

1. Backflow prevention device is not required. 2. Backflow prevention device is required.

_____ _____

Signature of O&M inspector Signature of O&M inspector

3. Type of backflow prevention device required. (Indicate one)

DOUBLE CHECK VALVE ASSEMBLY □

REDUCE PRESSURE PRINCIPAL ASSEMBLY □

FOR MARINA COAST WATER DISTRICT USE ONLY

METER DATA
Outgoing Meter Information

Meter Size	Meter No.	Meter Make	Date Issued	No. Digits	Meter Reading

Meter Issued By: _____ Date: _____

Incoming Meter Information

Meter Size	Meter No.	Meter Make	Date Returned	No. Digits	Meter Reading

Meter Received By:
_____ Date: _____

Description	Code Amount	Amount Paid	Date Received	Date of Passed Inspection	Amount Refunded	Date Refund Returned	Comments
Gate Valve/Meter Deposit	$650.00						
Water Consumption Deposit	$1,100.00 Minimum						
Relocate Meter	$140.00 per Occurrence				N/A	N/A	
Set or Remove Meter	$140.00				N/A	N/A	
Min. Monthly Service Charge	$65.00				N/A	N/A	

Please attach calculation

COPIES OF VALID REQUIRED LICENSES, PERMITS AND INSURANCE MUST BE PRESENTED FOR DUPLICATION BY MARINA COAST WATER DISTRICT UPON REQUEST

_____ _____ _____
Print Applicant or Agent's Name | Certification of Applicant and/or Signature of Applicant's Authorized Agent | Date

THE APPLICANT ACKNOWLEDGES AND REPRESENTS AS FOLLOWS:

1. The Applicant requesting temporary hydrant service must obtain a temporary hydrant permit from marina Coast Water District. As a part of the permitting process the appropriate Fire Department will be informed of the temporary hydrant service by marina Coast Water District prior to the approval of the permit.

2. The Applicant shall attach a map of the proposed hydrant location to this form. Hydrant location shall be approved by the Engineer.

3. The Applicant has received copies of and understands and agrees to comply with the regulations of Marina Coast Water District pertaining to temporary service through fire hydrants.

4. Water service will be subject to the Applicant's compliance with the regulations of the District in effect at that time.

5. The Applicant agrees to indemnify and hold marina coast Water District harmless from and against any damage or claims connected with unilateral service termination by Marina Coast Water District.

6. Damage to the water hydrants, valves or any portion of the water system shall be immediately reported to the Operations and Maintenance Superintendent, Mr. Jim Dowless, at (8310 384-6131 for repair at the expense of the permit holder.

7. An approved gate valve will be furnished by the District and placed on the outlet of the hydrant to control the flow, and shall not be operated except in a manner which will not cause pressure surges in the main. Direct connection of hoses to hydrant outlets will not be permitted, nor shall the control valves of the hydrants be operated except with the gat valve closed. Hydrant control valves shall not be operated except by Marina Coast Water District personnel.

8. The Applicant shall exercise strict water conservation practices.

9. Water usage shall be metered by Marina Coast Water District at the expense of the Applicant.

10. marina Coast Water District personnel shall remove any hydrant meter without an appropriately issued and installed Marina Coast Water District lock-out tab.

11. The Applicant shall be required to submit copies of up to date liability and additional Named Insureds and Subrogation Waivers. The Applicant shall furnish certificates of insurance as required by Marina Coast Water District standards. Marina Coast Water District shall be named as Additional Named Insureds. All required insurance policies shall waive all insurers of Contractor subrogation rights against marina Coast Water District.

12. Hydrant connections are permitted if, in the judgment of the District, adequate backflow prevention devices are in place. The Applicant shall install, maintain, and operate a mechanical or other methods or devices approved by the District to protect the water supply from possible contamination to the District's satisfaction. Failure on the part of the Applicant to comply with the District's requirements relative to cross-contamination and backflow prevention will be sufficient reason for discontinuing service until such time as the requirements have been met.

13. Hydrant meters hall be installed so that all hydrant outlets are readily accessible at all times to Fire Agency in the event of a fire.

AGREEMENTS

Workers' Compensation Insurance - By its signature hereunder, Contractor certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and he/she will comply with such provisions before commencing the performance of the work of this contract.

Indemnification - To the fullest extent permitted by law, Contractor shall indemnify and hold harmless and defend MCWD, its directors, officers, employees, or authorized volunteers, and each of them from and against:

a. Any and all claims, demands, causes of action, damages, costs, expenses, losses or liabilities, in law or in equity, of every kind and nature whatsoever for, but not limited to, injury to or death of any person including District and/or Contractor, or any directors, officers, employees, or authorized volunteers of District or Contractor, and damages to or destruction of property of any person, including but not limited to, MCWD and/or Contractor or their directors, officers, employees, or authorized volunteers, arising out of or in any manner directly or indirectly connected with the work to be performed under this agreement, however caused, regardless of any negligence of MCWD or its directors, officers, employees, or authorized volunteers, except the sole negligence or willful misconduct or active negligence of MCWD or its directors, officers, employees, or authorized volunteers;

b. Any and all actions, proceedings, damages, costs, expenses, penalties or liabilities, in law or equity, of every kind or nature whatsoever, arising out of, resulting from, or on account of the violation of any governmental law or regulation, compliance with which is the responsibility of Contractor;

c. Any and all losses, expenses, damages (including damages to the work itself), attorneys' fees, and other costs, including all costs of defense, which any of them may incur with respect to the failure, neglect, or refusal of Contractor to faithfully perform the work and all of the Contractor's obligations under the contract. Such costs, expenses, and damages shall include all costs, including attorneys' fees, incurred by the indemnified parties in any lawsuit to which they are a party.

d. Consultant acknowledges and understands that the area in and around which the work will be performed has been identified as a possible location of munitions and explosives of concern ("MEC"). All indemnification obligations of Consultant under this Agreement shall specifically include claims and demands involving, arising out of or related to MEC.

Contractor shall defend, at Contractor's own cost, expense and risk, any and all such aforesaid suits, actions or other legal proceedings of every kind that may be brought or instituted against MCWD or MCWD's directors, officers, employees, or authorized volunteers.

Contractor shall pay and satisfy any judgment, award or decree that may be rendered against MCWD or its directors, officers, employees, or authorized volunteers, in any such suit, action or other legal proceeding.

Contractor shall reimburse MCWD or its directors, officers, employees, or authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided.

Contractor agrees to carry insurance for this purpose as set out in the specifications. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the MCWD, or its directors, officers, employees or authorized volunteers.

Commercial General Liability and Automobile Liability Insurance - The Contractor shall provide and maintain the following commercial general liability and automobile liability insurance:

Coverage - Coverage for commercial general liability and automobile liability insurance shall be at least as broad as the following:

1. Insurance Services Office Commercial ***General Liability*** Coverage (Occurrence Form CG 0001)

2. Insurance Services Office ***Automobile Liability*** Coverage (Form CA 0001), covering Symbol 1 (any auto) (owned, non-owned and hired automobiles)

Limits - The Consultant shall maintain limits no less than the following:

1. ***General Liability*** - Two million dollars ($2,000,000) per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit or products-completed operations aggregate limit is used, either the general aggregate limit shall apply separately to the project/location (with the ISO CG 2503, or ISO CG 2504, or insurer's equivalent endorsement provided to the MCWD) or the general aggregate limit and products-completed operations aggregate limit shall be twice the required occurrence limit.

2. ***Automobile Liability*** - One million dollars ($1,000,000) for bodily injury and property damage each accident limit.

Required Provisions - The general liability and automobile liability policies are to contain, or be endorsed to contain the following provisions:

1. The MCWD, its directors, officers, employees, or authorized volunteers are to be given insured status (via ISO endorsement CG 2010, CG 2033, or insurer's equivalent for general liability coverage) as respects: liability arising out of activities performed by or on behalf of the Contractors; products and completed operations of the Contractor; premises owned, occupied or used by the Contractor; or automobiles owned, leased, hired or

borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the MCWD, its directors, officers, employees, or authorized volunteers.

2. For any claims related to this project, the Contractor's insurance shall be primary insurance as respects the MCWD, its directors, officers, employees, or authorized volunteers. Any insurance, self-insurance, or other coverage maintained by the MCWD, its directors, officers, employees, or authorized volunteers shall not contribute to it.

3. Any failure to comply with reporting or other provisions of the policies including breaches of warranties shall not affect coverage provided to the MCWD, its directors, officers, employees, or authorized volunteers.

4. The Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. Each insurance policy required by this clause shall state or be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days (10 days for non-payment of premium) prior written notice by U.S. mail has been given to the MCWD.

Such liability insurance shall indemnify the Contractor and his/her sub-contractors against loss from liability imposed by law upon, or assumed under contract by, the Contractor or his/her sub-contractors for damages on account of such bodily injury (including death), property damage, personal injury and completed operations and products liability.

The general liability policy shall cover bodily injury and property damage liability, owned and non-owned equipment, blanket contractual liability, completed operations liability, explosion, collapse, underground excavation and removal of lateral support.

The automobile liability policy shall cover all owned, non-owned, and hired automobiles.

All of the insurance shall be provided on policy forms and through companies satisfactory to the MCWD.

Deductibles and Self-Insured Retentions - Any deductible or self-insured retention must be declared to and approved by the MCWD. At the option of the MCWD, the insurer shall either reduce or eliminate such deductibles or self-insured retentions.

Acceptability of Insurers - Insurance is to be placed with insurers having a current A.M. Best rating of no less than A-:VII or equivalent or as otherwise approved by the MCWD.

MEC Coverage: All insurance maintained by Contractor shall include coverage for services, work in or around MEC, or claims, damage or injury related in any way to this Agreement which arise from MEC. The Marina Coast Water District, its officers, directors and employees and any of its authorized representatives and volunteers shall be named as additional insureds under all insurance maintained by Consultant related in any way to work performed by it on behalf of the Marina Coast Water District.

Workers' Compensation and Employer's Liability Insurance - The Contractor and all sub-contractors shall insure (or be a qualified self-insured) under the applicable laws relating to workers' compensation insurance, all of their employees working on or about the construction site, in accordance with the "Workers' Compensation and Insurance Act," Division IV of the Labor Code of the State of California and any Acts amendatory thereof. The Contractor shall provide employer's liability insurance in the amount of at least $1,000,000 per accident for bodily injury and disease.

Responsibility for Work - Until the completion and final acceptance by the MCWD of all the work under and implied by this Agreement, the work shall be under the Contractor's responsible care and charge. The Contractor shall rebuild, repair, restore and make good all injuries, damages, re-erections, and repairs occasioned or rendered necessary by causes of any nature whatsoever.

The Contractor shall provide and maintain builder's risk insurance (or installation floater) covering all risks of direct physical loss, damage or destruction to the work in the amount specified in the General Conditions, to insure against such losses until final acceptance of the work by the MCWD. Such insurance shall include[1] explosion, collapse, underground excavation and removal of lateral support. The MCWD shall be a named insured on any such policy. The making of progress payments to the Contractor shall not be construed as creating an insurable interest by or for the MCWD or be construed as relieving the Contractor or his/her subcontractors of responsibility for loss from any direct physical loss, damage or destruction occurring prior to final acceptance of the work by the MCWD.

The insurer shall waive all rights of subrogation against the MCWD, its directors, officers, employees, or authorized volunteers.

Evidences of Insurance - Prior to execution of the contract, the Contractor shall file with the MCWD a certificate of insurance (Accord Form 25-S or equivalent) signed by the insurer's representative. Such evidence shall include an original copy of the additional insured endorsement signed by the insurer's representative. Such evidence shall also include confirmation that coverage includes or has been modified to include Required Provisions 1-5.

The Contractor shall, upon demand of the MCWD, deliver to the MCWD such policy or policies of insurance and the receipts for payment of premiums thereon.

All insurance correspondence, certificates, binders, etc., shall be mailed to:

Marina Coast Water District
11 Reservation Road
Marina, CA 93933
Attn: Administrative Services Manager

Sub-Contractors - In the event that the Contractor employs other contractors (sub-contractors) as part of the work covered by this agreement, it shall be the Contractor's responsibility to require and confirm that each sub-contractor meets the minimum insurance requirements specified above.

APPENDIX 15

REQUIREMENTS FOR THE DESIGN, INSTALLATION AND MAINTENANCE OF GREASE TRAPS, GREASE INTERCEPTORS, OR OTHER DEVICES

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 15

REQUIREMENTS FOR THE DESIGN, INSTALLATION, AND MAINTANENCE OF GREASE TRAPS, GREASE INTERCEPTORS, OR OTHER DEVICES

Design Requirements

Sizing Formula. The size of a grease trap or grease interceptor shall be as determined by the District Engineer. Notwithstanding the foregoing, grease traps shall be no smaller than an 80-gallon capacity trap with a 75-gallon per minute flow rate.

Location of Grease Traps, and Grease Interceptors. They shall be located outside buildings, unless a finding is made by the District inspector that the location of the building on the site or some other aspect of the use prevents an outside location and that placement within a building is not hazardous to public health and safety; They shall be located and maintained at all times so as to prevent the entrance of foreign materials, shall be easily accessible for cleaning inspection and removal of intercepted grease, and shall pose no hazard to public health or safety; If they are not designed in accordance with Uniform Plumbing Code (UPC) Section 711 and/or Appendix H, they must be designed by a professional engineer, must be consistent with the District standards, and must be approved by District Engineer.

Related Equipment. They shall be fitted with a standard service access cover or manhole. If a manhole is required, it shall be brought to grade and finished with standard manhole cover and ring. A sampling box shall be located on the discharge side.

All discharging fixtures shall be individually trapped and vented in accordance with the UPC.

They shall be constructed of durable materials and shall have a full-size gas-tight cover which can easily be removed.

Installation

An approved grease trap or grease interceptor shall be installed in the waste line leading from sinks, drains, and other fixtures or equipment. A permit shall be obtained from the District inspector prior to the installation of a grease trap or grease interceptor.

They shall not be installed until the type and/or model has been subjected to, and has fully complied with, tests acceptable to the District inspector. Where an existing grease trap or grease interceptor is found acceptable by the District inspector, such equipment will be allowed to remain in use. Whenever a grease trap or grease interceptor does not comply with these provisions, the District inspector shall require corrective measures.

Prohibited and/or Restricted Equipment. The installation and use of garbage grinders (disposals)

in commercial-food establishments is prohibited, except where a 1000 gallon-plus interceptor is in use; The connectionof high-temperature/high-flow dishwashers to a grease trap or grease interceptor is prohibited; The use of enzymes or bacterial cultures designed to disperse grease is prohibited unless specifically approved in writing by the Monterey County health department and the MRWPCA.

After the effective date of this chapter, all establishments covered by this chapter shall install an approved grease trap or grease interceptor of sufficient size to prevent discharges into the sewer system.

Maintenance

Traps and interceptors shall be maintained in efficient operating condition by periodic removal of the accumulated grease. No collected grease shall be introduced into any public or private drainage piping.

Any grease trap or grease interceptor required by this chapter shall be readily accessible for inspection and properly maintained to assure that accumulations of grease or oil do not impair its efficiency or transport grease or oil into the sewer system.

All food service establishments or businesses required under this chapter to install and maintain a grease trap or grease interceptor shall maintain a maintenance record for the grease trap or grease interceptor, which shall be transmitted to the District Engineer on a quarterly basis. This record shall include the date, the name of the person who performed cleaning and the disposal site of the waste. The record shall be posted in a conspicuous location and be available for review by the District's inspector or designee at each routine inspection and at such other time as necessary for the District to determine whether a particular establishment may be performing maintenance contrary to the provisions of this chapter.

The District inspector or its designee shall perform grease trap and grease interceptor inspections bi-annually, or more often at the discretion of the District should maintenance reports not be received or should a grease trap or grease interceptor fail to operate properly.

In the event the city determines that a food service establishment or business required to install and maintain a grease trap either fails to maintain the maintenance record required by this section, or fails to maintain the grease trap as required by this section, the city may require the immediate installation of a grease interceptor.

TABLE 10-2
Grease Traps

Total Number of Fixtures Connected	Required Rate of Flow per Minute, Gallons	Grease Retention Capacity, Pounds
1	20	40
2	25	50
3	35	70
4	50	100

TABLE 10-2
Grease Traps (Metric)

Total Number of Fixtures Connected	Required Rate of Flow per Minute, Liters	Grease Retention Capacity, kg
1	76	18
2	95	22
3	132	31
4	189	45

Note: For installations with more than four (4) fixtures, the Administrative Authority may permit the use larger grease traps designed not to exceed the parameters of Section 1011.4, but not to exceed seventy-five (75) GPM (284 liters per minute).

See also Appendix H, Procedures for Sizing Commercial Kitchen Grease Interceptors.

H 4 Sizing Criteria

(a) **Parameters**. The parameters of sizing a grease interceptor are hydraulic loading and grease storage capacity, for one or more fixtures.

(b) **Sizing Formula.** The size of the interceptor shall be determined by the following formula:

Number of meals per peak hour 1		Waste flow rate 2		Retention time 3		Storage factor 4		Interceptor Size (liquid capacity)
	X		X		X		=	

1. Meals Served at Peak Hour

2. Waste Flow Rate
   a. With dishwashing machine…….6 gallon (22.7 L) flow
   b. Without dishwashing machine……5 gallon (18.9 L) flow
   c. Single service kitchen……..2 gallon (7.6 L) flow
   d. Food waste disposer…….1 gallon (3.8 L) flow

3. Retention Times
   Commercial kitchen waste
   Dishwasher……2.5 hours
   Single service kitchen
   Single serving…….1.5 hours

4. Storage Factors
   Fully equipped commercial kitchen…….8 hour operation: 1
   ……16 hour operation: 2
   ……..24 hour operation: 3
   Single Service Kitchen……1.5

H 5 Effluent Sampling

An effluent sampling box on grease interceptors may be required by the Administrative Authority.

H 6 Abandoned Grease Interceptors

Abandoned grease interceptors shall be pumped and filled as required for abandoned sewers and sewage disposal facilities in Section 722.0

APPENDIX 16A

SAMPLE EASEMENT

APPENDIX 16A

MARINA COAST WATER DISTRICT
SAMPLE EASEMENT

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

Marina Coast Water District
11 Reservation Road
Marina, CA 93933
Attention: District Engineer

(Space Above For Recorder's Use)

The undersigned grantor declares:

Documentary Transfer Tax exempt
Pursuant to Section 11932 of the
Revenue and Taxation Code

GRANT OF EASEMENTS

This Grant of Easements, dated this ___ day of _____, 2006, is made by _____, a California _____, ("Grantor") hereby grants and conveys to MARINA COAST WATER DISTRICT, a county water district and political subdivision of the State of California ("Grantee"), and its successors and assigns, a perpetual non-exclusive easement and right-of-way for sewer, water, and reclaimed water pipelines and appurtenant facilities for transmission purposes, including, specifically, but not by way of limitation, the right to install, construct, reconstruct, remove and replace, renew, inspect, maintain, repair, improve, relocate and otherwise use water, reclaimed water or sewer pipeline or pipelines together with incidental appurtenances, connections, and structures in, over, under, upon, along, through and across the real property hereinafter described.

Said easement shall lie in, over, under, upon, along, through and across that certain real property situated in the County of Monterey, State of California, described in Exhibit "A" and depicted in Exhibit "B" (the "Easement Area") both of which are attached hereto and by this reference incorporated herein, together with the right to enter upon and to pass and re-pass over and along the Easement Area for the construction, operation and maintenance of the facilities to be constructed in the Easement Area by Grantee or its successors and assigns, its officers, agents and employees and by persons under contract with Grantee or its successors and assigns.

It is understood and agreed that the easements and rights-of-way acquired herein are acquired subject to the rights of the Grantor, and its successors and assigns, to use the surface of the Easement Area to the extent that such use is compatible with the full and free exercise of said easement and rights-of-way by the Grantee; provided, however, that no streets, alleys, roadways, fences, block walls, or other structures or other improvements shall be constructed upon, over, and along the Easement Area without first obtaining the prior written consent of Grantee. Grantee does hereby agree that it will not unreasonably withhold such consent.

No earth, dirt, fill or any other material shall be deposited, placed or maintained on or over the surface of the ground, nor shall any earth be removed from the cover of said pipeline or pipelines and incidental facilities without first obtaining the prior written consent of Grantee. Grantee does agree that it will not unreasonably withhold such consent. It is understood and agreed that Grantee shall bear no responsibility nor assume any cost for the maintenance, repair or replacement of any trees, shrubbery, fences, walls or other plantings or structures situated within the Easement Area that may be injured, damaged or destroyed by Grantee's use of the Easement Area.

In consideration of Grantee's acceptance and recordation of this Grant of Easement, Grantor covenants and agrees for itself and its successors and assigns that any future relocation of the water, reclaimed water or sewer pipeline or pipelines and incidental facilities described herein, if Grantee in its sole discretion consents in writing to such relocation, shall be at the sole expense of Grantor or its successors and assigns and that Grantee shall have no responsibility for such costs.

The Grantor and persons or concerns executing this Grant of Easement represent and warrant to Grantee that Grantor is the owner in fee title of the herein described property, or has the right to make this conveyance, and that it has advised the Grantee in writing of any and all outstanding easements, encumbrances, or deeds of trust.

This Easement Deed and the provisions contained herein shall be binding upon Grantor, Grantee, and their respective successors and assigns.

IN WITNESS WHEREOF, this Grant of Easement has been executed this _____ day of _____, 20__.

_____
Grantor

By _____

Title _____

PLEASE NOTARIZE ALL SIGNATURES

Project: _____
Title Company: _____
Title Report No. _____

APPENDIX 16B

SAMPLE ORD COMMUNITY EASEMENT

APPENDIX 16B

MARINA COAST WATER DISTRICT
SAMPLE ORD COMMUNITY EASEMENT

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

Marina Coast Water District
11 Reservation Road
Marina, California 93933
Attn: General Manager

(Space Above For Recorder's Use)

The undersigned grantor declares:

Documentary Transfer Tax exempt
Pursuant to Section 11932 of the
Revenue and Taxation Code

GRANT OF EASEMENTS

This Grant of Easements, dated this _____ day of _____, 20__, is made by _____, a California _____, ("**Grantor**") in favor of Marina Coast Water District, a county water district and political subdivision of the State of California ("**Grantee**").

A. Pursuant to Section 334 of Public Law 104-201, Fort Ord Reuse Authority ("FORA") received the property that is the subject of this Easement ("Property") from the United States of America by Quitclaim Deed ("Government Deed"), reserving to the United States ("Government") certain exclusions, restrictions, stipulations and covenants, and burdening FORA with certain obligations, said deed dated _____, duly recorded in the County of Monterey, Office of the County Recorder, as Document No. _____;

B. FORA conveyed to Grantor its interest in the Property, reserving to the Government and FORA certain exclusions, restrictions, stipulations and covenants, and burdening Grantor with certain obligations, said deed dated _____, duly recorded in the County of Monterey, Office of the County Recorder, as Document No. _____;

C. Grantee desires to receive an easement over said land and Grantor has agreed to grant to Grantee such easement as hereinafter set forth.

NOW, THEREFORE, in consideration of One Dollar ($1.00), Grantor hereby grants and conveys to Grantee, its successors and assigns, a non-exclusive easement for the purposes of installation, inspection, replacement, maintenance and removal of a [potable water main] [reclaimed water main] [sanitary sewer] (the “Utility”) on, over, under, across and along that Property located in the County of Monterey, State of California, as more particularly described on Exhibit A attached hereto (the “Easement Property”).

Grantor hereby agrees that no permanent structures or improvements shall be built on the Easement Property.

Grantee shall indemnify, defend and hold the Grantor harmless from any and all claims, damage or expense arising out of the actions or omissions of the Grantee, its agents and employees with respect to the installation, operation, maintenance, repair or removal of the Utility described above.

Grantor agrees for itself and its heirs and assigns that the Utility on the Easement Property shall be and remain the personal property of the Grantee and may not be altered, obstructed or removed without the express written consent of the Grantee. Grantee, and its contractors, agents and employees, shall have the fight to trim or cut trees and/or roots which may endanger or interfere with said Utilities and shall have free access to said Utility and every part thereof, at all times for the purpose of exercising the fights herein granted; provided, however, that in making any excavation on said Easement Property, Grantee shall make the same in such manner as will cause the least injury to the surface of the ground around such excavation, and shall replace the earth so removed by it and restore the area to as near the same condition as it was prior to such excavation as is practical.

In its transfer of the Property to FORA, the Government provided certain information regarding the environmental condition of the Property. That same information was provided by FORA in its conveyance to Grantor. Pursuant to the Government Deed, Grantor is required to provide to any grantee of an interest in the Property the environmental protection provisions contained in the Government Deed. The Grantor has no knowledge regarding the accuracy or adequacy of such information.

The italicized information below is copied verbatim (except as discussed below) from the FORA deed conveying the Property to the Grantor. The Grantee hereby acknowledges and assumes all responsibilities with regard to the Property placed upon the Grantor under the terms of the aforesaid Government deed to Grantor and Grantor grants to Grantee all benefits with regard to the Property under the terms of the aforesaid Government Deed. Within the italicized information only, the term "Grantor" shall mean the Government, and the term "Grantee" shall mean the _____; to avoid confusion, the words "the Government" have been added in parenthesis after the word "Grantor", and "_____" has been added in parenthesis after the word "Grantee".

Include required provisions from Ord Community deeds here.

[SIGNATURE ON IMMEDIATELY FOLLOWING PAGE]

Executed this_____ day of _____, 20__.

GRANTOR:

_____,
a California _____

By: _____
Name:_____
Title:_____

By: _____
Name:_____
Title:_____

By:_____
Name: _____
Title: _____

PLEASE NOTARIZE ALL SIGNATURES

Project: _____
Title Company: _____
Title Report No. _____

APPENDIX 16C

SAMPLE EASEMENT CERTIFICATE OF ACCEPTANCE

APPENDIX 16C

CERTIFICATE OF ACCEPTANCE
GOVERNMENT CODE SECTION 27281

This is to certify acceptance of the interests conveyed by the foregoing Grant of Easements from _____, a California _____, to Marina Coast Water District, a county water district and political subdivision of the State of California ("**MCWD**") and consent by MCWD to recordation of this Grant of Easements by its duly authorized member, pursuant to the authorization and consent MCWD granted on _____.

Dated this ___ day of_____, 20__, at Marina, California.

MARINA COAST WATER DISTRICT,
a county water district and political subdivision
of the State of California

By:_____
Name: _____
Title: General Manager

APPENDIX 16D

SAMPLE SUBORDINATION OF DEED OF TRUST TO EASEMENT DEED

APPENDIX 16C

MARINA COAST WATER DISTRICT
SAMPLE SUBORDINATION OF DEED OF TRUST TO EASEMENT DEED

Recording Requested by:
MARINA COAST WATER DISTRICT

Return to:
MARINA COAST WATER DISTRICT
11 Reservation Road
Marina, California 92933
Attention: District Engineer

NO CONSIDERATION

SUBORDINATION OF DEED OF TRUST
TO
EASEMENT DEED

Exempt Govt.
Code Sec. 6103

Beneficiary under that certain Deed of Trust recorded on _____, in Book ____, Page(s) _____ , Official Records of Monterey County, California, agree that the easement granted to MARINA COAST WATER DISTRICT by_____, dated _____, recorded concurrently herewith, shall be and remain paramount, prior, and superior to and forever bind the interests of the undersigned under said Deed of Trust, for all purposes as fully as though said easement had been executed and delivered prior to the creation of said Deed of Trust and the latter made and accepted specifically subject to and subordinate thereto.

DATED: _____

_____

_____
(Beneficiary)

By _____

By _____

PLEASE NOTARIZE ALL SIGNATURES

Project: _____
Title Company: _____
Title Report No. _____

APPENDIX 17

PERMIT EXTENSION LETTER

Marina Coast Water
11 Reservation Road
Marina, CA 93933
(831) 384-6131

APPENDIX 17

Date

MARINA COAST WATER DISTRICT
11 Reservation Road
Marina, California 92933

Re: Project:
Permit Extension

Dear Mr. _____, District Engineer:

By this letter we are informing you that construction of the subject project has not begun prior to the one year anniversary of the agreement between _____ and the District, in accordance with the articles of Section 300.15of the STANDARD SPECIFICATIONS.

The project plans have not changed, and we provide a recent copy of the plans for your verification.

or

The plans have changed, as detailed below, and we provide for your review and approval a recent copy of the plans, with the changes delineated.

Sincerely,

Developer's engineer

APPENDIX 18

VARIANCE REQUEST

Variance Request Form
for Marina Coast Water District

Assigned_____
Reviewed_____
Granted / Denied
Account No._____

PART A – APPLICANT INFORMATION

Requested Variance (include District Code Section) _____

Date of Submittal of Variance Request_____

Has applicant applied for the same or similar variance previously? □YES □NO □UNKNOWN

If YES, to above, please provide details_____

Request:

Name of Applicant (Contact) _____

Applicant Relationship to Owner_____

Billing Name (if different from above) _____

Street/Mailing Address for Variance_____City_____State___Zip_____

Street/Mailing Address for Billing (if different)_____City_____State___Zip_____

Daytime Phone Number_____ Fax Number_____

PART B – BASIS OF VARIANCE REQUEST

1. The strict application of the code would result in unfair or unequal treatment, undue hardship, or an emergency condition exists which requires that the variance be granted; and,
2. Granting the variance will not cause a significant adverse effect on the water supply or on service to other persons served by the district; and,
3. The variance is in the best interests of the district.

This variance request may only be based on the above conditions. Please briefly describe the basis of your request and provide documentation of need in Part C. If further space is required in the completion of this form, provide a note of such and attach supporting documentation with application.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

PART C – EVIDENCE TO SUPPORT VARIANCE

Provide documentation to support you request. Documentation should concisely prove the need for a variance. Please list documents below and attach copies with your application. Original records will not be returned.

_____

_____

_____

_____

_____

PART D – REQUESTED ACTION

What specific action are you requesting that the Board take?

_____

_____

_____

_____

☐ *I understand that the application for a variance does not guarantee a variance will be granted.*

☐ *I have contacted the owner and he has given his permission to process this application, or I am the property owner.*

Applicant:

Applicant's Name: _____

Applicant's Signature: _____ Date: _____

PART D – GENERAL MANAGER'S RECOMMENDATION (for internal use by Marina Coast Water District)

☐ Having fully considered the above application for variance, I find that the Application has NOT proven by clear and convincing evidence that the requirements of Section 2.08 Variances have been met. Based on the foregoing, a VARIANCE IS NOT RECOMMENDED.

☐ Having fully considered the above application for variance, I find that the Applicant has proven by clear and convincing evidence that the requirements of Section 2.08 Variances have been met. Based on the foregoing, a VARIANCE IS RECOMMENEDED.

This request will be on the Marina Coast Water District Board agenda currently scheduled for ___ _____. Please call the District to confirm this date.

Explanation_____

_____

_____

_____

_____ _____

Signature of District General Manager Date

APPENDIX 19

ON-SITE RECYCLED WATER USER PLAN

APPENDIX 19

MARINA COAST WATER DISTRICT

ON-SITE RECYCLED WATER USER PLAN REQUIREMENTS

GENERAL INFORMATION

- Project Name.
- Map of use areas and narrative description.
- Assessor's parcel numbers.
- Property owner's name, title, address, and phone number.

SITE CHARACTERISTICS

- Type of property.
- Acres to be irrigated.
- Topography of the site (slope of the land).
- Soil types and their capacities to accept water, minimum infiltration rate, etc.
- Present source of irrigation water. Describe method of disconnection from current system and backflow prevention.

IRRIGATION DEMAND

- Calculations of estimated irrigation demand by month.
- Estimated annual demand.
- Maximum day demand.
- Irrigation time of day.
- Irrigation application rate.

DESIGN AND CONSTRUCTION

- Source of recycled water.
- Schematic diagram of recycled water distribution system.
- Detailed maps of on-site piping location, size, and type of pipe, valves, sprinkler heads, and points of use.
- Name, title, address, and phone number of the person who will maintain accurate up-to-date maps, plans, and operation information for the on-site non-residential recycled water system.
- Describe evapotranspiration based timer operation.
- Identify points of possible interconnection with the water system and describe air gap separations.
- Describe types of sprinkler heads or outlets that will apply the recycled water. Set back distances between the recycled water sprinklers and adjacent roads, walks, houses, businesses, food service areas, drinking fountains, swimming pools, and wells.
- Describe any outlets other than sprinklers, such as quick disconnects.

- List flushing blow off valves or air/vacuum relief valves. How will unauthorized discharges be prevented from these points.

OPERATION OF THE RECYCLED WATER SYSTEM

- List name, title, address, and phone number of the person responsible for the daily operation.
- Describe control water system that monitors the ET based watering schedule time of day, duration of cycles, and seasonal changes.
- List control measures to prevent over-spray and mosquito breeding.
- Describe what requirements will be instituted to curtail operation during rainy or windy weather.
- Describe contingency plan for maintaining irrigation if recycled water is not available.
- Identify points of public access to the irrigated areas.

SIGNAGE

- Describe the appearance, color, size, and language of the signs.
- Describe location and number of signs.

EMPLOYEE TRAINING

- Describe personnel training.
- Provide copies of any printed material used in training or informational purposes.

OVERSIGHT PROVISIONS

- List MCWDcontact persons.
- Include recycled water use agreement.
- Describe cross connection inspection.

APPENDIX 20

DECLARATION OF RESTRICTIONS REGARDING THE USE OF RECYCLED WATER FOR LANDSCAPE IRRIGATION

RECORDING REQUESTED BY
AND WHEN RECORDED RETURN TO:

Declaration of Restrictions Regarding
The Use of Recycled Water for Landscape Irrigation

The Property subject to this Declaration, described as_____
_____shall be subject to the following restrictions:

1. Recycled water shall be provided to the _____ Homeowners Association, herein referred to as the "Permittee" by the MCWD. Pursuant to its authority under their permit for the use of recycled water from the Regional Water Quality Control Board; MCWD identifies the Permitee as the agent authorized to operate and maintain the recycled water distribution system and to control the use and application of all recycled water throughout the subdivision consistent with the MCWD, state and local requirements.

2. Your home is provided with potable water and non-potable recycled water. Potable water is provided for interior water use, backyard irrigation and other like uses. Non-potable recycled water is provided solely for the irrigation of your front yard and its pipelines shall be maintained and operated by the Permittee and not the homeowner. No new irrigation system or modifications to existing systems may be made without the prior approval of the MCWD and the Permittee.

3. Recycled water shall not be used for backyard irrigation, indoor use, swimming pools or for any use other than for front yard irrigation. Each home shall be provided with a designated potable water supply connection for back yard irrigation. The homeowner is required to connect back yard irrigation systems to the designated potable water supply connection. The homeowner shall receive approval from the Permittee prior to connection.

4. Use of potable water for landscape irrigation is prohibited, where recycled water is available.

5. Cross-connections between potable and recycled water lines are prohibited.

6. From time to time public health inspections may be made to your front yard and back yard irrigation systems to assure the safe use of recycled water and protection of the potable water system. For these reasons, MCWD, the Permittee or its authorized agents is/are authorized to enter upon subject property (both front and backyards) for the purpose of inspecting the recycled water systems and ensuring compliance with applicable rules and regulations. In the event of a cross-connection or other violation, MCWD, the Permittee and/or its authorized agents may immediately disconnect the recycled water supply and take any other action reasonably necessary to remedy the violation, at the property owner's expense.

7. The Permittee shall provide MCWD, on a timely basis, once a year, evidence that the backflow-prevention device connected to the potable water meter has been inspected by an AWWA certified backflow protection device tester and is in good operating condition.

8. The Permittee and the Property Owners shall inform family members, visitors, renters and other occupants regarding proper use of recycled water.

9. Failure to adhere to these restrictions may result in penalties assessed in accordance with MCWD regulations as adopted from time to time.

Date:_____ Developer_____

APPENDIX 21

HOMEBUYER NOTIFICATION REGARDING THE USE OF RECYCLED WATER FOR FRONTYARD IRRIGATION

HOMEBUYER NOTIFICATION
The Use of Recycled Water for Landscape Irrigation

The home you are buying utilizes recycled water for front yard irrigation. This has proven to be a safe, efficient and water saving program. However, to ensure that the system operates correctly it is important that you adhere to certain regulations, which are recorded against your new home and property. Your signature below will confirm your understanding of the following:

1. Recycled water shall be provided to the _____ Homeowners Association, herein referred to as the "Permittee" by the MCWD. Pursuant to its authority under their permit for the use of recycled water from the Regional Water Quality Control Board; MCWD identifies the Permitee as the agent authorized to operate and maintain the recycled water distribution system and to control the use and application of all recycled water throughout the subdivision consistent with the MCWD, state and local requirements.

2. Your home is provided with potable water and non-potable recycled water. Potable water is provided for interior water use, backyard irrigation and other like uses. Non-potable recycled water is provided solely for the irrigation of your front yard and its pipelines shall be maintained and operated by the Permittee and not the homeowner. No new irrigation system or modifications to existing systems may be made without the prior approval of the MCWD and the Permittee.

3. Recycled water shall not be used for backyard irrigation, indoor use, swimming pools or for any use other than for front yard irrigation. Each home shall be provided with a designated potable water supply connection for back yard irrigation. The homeowner is required to connect back yard irrigation systems to the designated potable water supply connection. The homeowner shall receive approval from the Permittee prior to connection.

4. Use of potable water for landscape irrigation is prohibited, where recycled water is available.

5. Cross-connections between potable and recycled water lines are prohibited.

6. From time to time public health inspections may be made to your front yard and back yard irrigation systems to assure the safe use of recycled water and protection of the potable water system. For these reasons, MCWD, the Permittee or its authorized agents is/are authorized to enter upon subject property (both front and backyards) for the purpose of inspecting the recycled water systems and ensuring compliance with applicable rules and regulations. In the event of a cross-connection or other violation, MCWD, the Permittee and/or its authorized agents may immediately disconnect the recycled water supply and take any other action reasonably necessary to remedy the violation, at the property owner's expense.

7. The Permittee shall provide MCWD, on a timely basis, once a year, evidence that the backflow-prevention device connected to the potable water meter has been inspected by an AWWA certified backflow protection device tester and is in good operating condition.

8. The Permittee and the Property Owners shall inform family members, visitors, renters and other occupants regarding proper use of recycled water.

9. Failure to adhere to these restrictions may result in penalties assessed in accordance with MCWD regulations as adopted from time to time.

Your signature below verifies that you have read and understand these regulations and agree to be bound by them.

Date:_____ Buyer:

_____

APPENDIX 22

ON-SITE RECYCLED WATER NOTES

RECYCLED WATER NOTES

1. The recycled water system as shown on these plans shall be constructed in accordance with the standard plans and specifications of the Marina Coast Water District, and any additional requirements of the California Department of health Services. Contractor shall keep a copy of the standard specifications and drawings at the jobsite at all times.

2. The Marina Coast Water District shall be notified at least 48 hours prior to commencing work on the recycled water system. Phone (831) 384-6131 for inspection. A preconstruction meeting shall be held at least 24 hours before starting construction.

3. The District shall be notified two (2) days prior to the start of construction at (831) 384-6131and each workday thereafter until completion of the project.

4. The homeowner shall be responsible for providing access to and cooperation with the District Inspector to perform all testing and inspections.

5. Connections to the existing recycled water facilities shall be done by a licensed contractor in accordance with MCWD tie-in procedures.

6. There shall be no direct connections between the potable and recycled water systems.

7. Hose bibs are prohibited on the recycled water system.

8. All hose bibs shall be affixed to the building and shall be potable water.

9. The potable water system shall be protected by an approved backflow prevention device as shown on the Drawings.

10. Fill lines for water features (pools, fountains, etc.) shall be connected to the potable water system using copper pipe.

11. All pressure main line piping from the recycled water system shall be installed to maintain 10 feet minimum horizontal separation from all potable water piping. Where recycled and potable water pressure main line piping cross, the recycled water piping shall be installed below the potable water piping in a Class 200 purple-colored PVC sleeve which extends a minimum of 5 feet on either side of the potable water piping. Provide a minimum vertical clearance of 6 inches. Conventional (white) PVC pipe may be used for sleeve material if it is wrapped with purple warning tape, which reads "CAUTION: RECYCLED WATER - DO NOT DRINK".

12. Blue warning tape shall be placed over the pipe in the trench of all pipes carrying potable water. Warning tape shall be plastic, minimum 3-inches wide, imprinted with minimum 1-inch black letters reading “CAUTION BURIED WATER LINE BELOW.”

13. Purple warning tape shall be placed over the pipe in the trench of all pipes carrying recycled water. Warning tape shall be plastic, minimum 3-inches wide, imprinted with minimum 1-inch black letters reading “CAUTION BURIED RECYCLED WATER LINE BELOW.”

14. Recycled water piping shall be purple PVC and identified as recycled water pipes by continuous marking on both sides. The markings shall include the following: “WARNING RECYCLED WATER – DO NOT DRINK”, nominal pipe size, pressure rating, and ASTM designations.

15. All recycled water sprinkler control valves, isolation valves, quick couplers, regulators, ARVs, and appurtenances shall be tagged. Identification shall be weatherproof purple plastic, 3-inches by 4-inches with the words “WARNING RECYCLED WATER – DO NOT DRINK”. Imprinting shall be permanent and black in color. Use tags manufactured by T. Christy Enterprises or approved equal.

16. All areas where recycled water is used shall be posted with signs. Each sign shall state “RECYCLED WATER – DO NOT DRINK” and “AGUA IMPURA – NO TOMAR” and display the international “Do Not Drink” symbol.

17. All spray heads shall be adjusted to eliminate overspray onto adjacent hardscapes.

18. The irrigation system has been designed to and must be operated between the hours of 9:00 P.M. and 6:00 A.M. unless otherwise directed by the District Engineer.

19. Before activation of the recycled and potable water service, a cross connection test and inspection of the irrigation system will be performed. The homeowner or contractor shall arrange with the District for an irrigation coverage test. Modifications to the irrigation system may be required.

20. Contact MCWD Engineering Department office two days prior to the irrigation system coverage test at (831) 384-6131 and arrange a walk through of the system.

21. Use of recycled water at this site is subject to the requirements of an On-Site Recycled Water User Plan approved by MCWD.

22. Failure to comply with any of the Marina Coast Water District Standards and Regulations may result in termination of recycled and/or potable water service.

23.

    1. The installation of the irrigation water system shall conform to the regulations for the construction of irrigation water systems within the "MCWD" and the accompanying plans and specifications.

    2. All on-site constant recycled and potable water main line piping installed on this project shall be identified in accordance with the MCWD Water Code and the irrigation specifications.

APPENDIX 23

CROSS CONNECTION SHUTDOWN TEST

MARINA COAST WATER
CROSS CONNECTION SHUTDOWN TEST

Homeowner Name: _____

Address: _____

Date: _____

Date of last cross connection test: _____

Circle one: Initial Occupancy* Change of Occupant 4 year test

* If initial occupancy - test potable water in home to assure absence of recycled water.

1. Check if resident is at home and advise that test is occurring.

2. Connect pressure gage to potable water hose bib in front yard.

   Read and record pressure _____

3. Turn off recycled water system at recycled water meter.

   Read and record pressure _____

4. Turn on all irrigation valves. Observe whether water is available

5. **If there is no variation in pressure and no water in the irrigation system, then there is no cross connection.**

6. Cross connection (circle one) : Yes (1) No

7. Confirm curb markings are consistent with potable and recycled water meters locations.

Comments: _____

Signed: _____

Name: _____

1 If a cross connection exists, keep recycled water turned off and proceed with notification to owner and MCWD staff.

APPENDIX 24

COMPLIANCE INSPECTION REPORT

MARINA COAST WATER DISTRICT
COMPLIANCE INSPECTION REPORT

Homeowner Name: _____ Lot No: _____

Address: _____

Date of Last Inspection: _____ Today's Date: _____

Type of Inspection (circle one):

Annual Change of Occupancy Unscheduled

1. Is there evidence of ponding of recycled water, leaks, breaks, or mosquitoes breeding within the irrigation area due to ponded water?
   No
   Yes _____

2. Are warning tags, stickers, and above ground markings properly posted to inform the homeowner that irrigation water is recycled water and is not suitable for drinking?
   No
   Yes _____

3. Is there a spa, swimming pool, fountain, or other water feature?
   No
   Yes _____

4. Is there evidence of unapproved modifications from the record drawings?
   No
   Yes _____

   If Yes 1- Check that approved materials have been used.
   2- Perform cross connection test.
   3- Determine what follow-up actions are needed

Comments: _____

_____

_____

_____

Signed: _____

Name: _____

APPENDIX 25

FRONT YARD DESIGN REVIEW & INSPECTION

MARINA COAST WATER DISTRICT
FRONT YARD DESIGN REVIEW & INSPECTION

Homebuilder Name:_____ Lot Number:_____

Homeowner Name:_____

Address: _____

Design Review		**Date Completed**	**Initial**
1.	Landscape design prepared by (circle one): Homeowner Landscape Architect Other		
2.	Layout and clearances conform to Recycled Water Standards.		
3.	Materials list for irrigation conforms to recycled Water Standards		
4.	The design plans comply with all other applicable requirements.		

Comments: _____

_____

Inspection

Inspection to occur at completion of construction prior to backfilling of the irrigation system.

		Date Completed	**Initial**
1.	Meter locations consistent with curb markings.		
2.	Construction performed by (circle one): Homeowner Contractor Owner		
3.	Potable line taped.		
4.	Backflow prevention device tested by EID.		
5.	Irrigation pipe layout and clearances conform to design drawings and standards.		
6.	Depth of pipes and separation requirements meet design standards.		
7.	Irrigation line to back yard and POC constructed and clearly identified.		
8.	The constructed irrigation system complies with all the applicable requirements and is completed.		

Comments: _____

_____

APPENDIX 26

BACK YARD DESIGN REVIEW & INSPECTION

MARINA COAST WATER DISTRICT
BACK YARD DESIGN REVIEW & INSPECTION

Contractor Name:_____ Lot Number:_____

Homeowner Name:_____

Address: _____

Design Review		**Date Completed**	**Initial**
1	Landscape design prepared by (circle one): Homeowner Landscape Architect Other	_____	_____
2	Layout and clearances conform to Recycled Water Standards.	_____	_____
3	Materials list for irrigation conforms to Recycled Water Standards	_____	_____
4	The design plans comply with all other applicable requirements.	_____	_____

Comments: _____

_____

Inspection

Inspection to occur at completion of construction prior to backfilling the of irrigation system.

		Date Completed	**Initial**
1.	Construction performed by (circle one): Homeowner Contractor Other	_____	_____
2.	Copper fill line for water features installed correctly.	_____	_____
3.	Irrigation pipe layout and clearances conform to design drawings and standards.	_____	_____
4.	Depth of pipes and separation requirements meet design standards.	_____	_____
5.	The constructed irrigation system complies with all the applicable requirements and is complete.	_____	_____
6	The approved plans can be used for the record drawings.	_____	_____

Comments: _____

_____

_____

APPENDIX 27

NOTICE OF VIOLATION FORM
RECYCLED WATER USE

NOTICE OF VIOLATION FORM
RECYCLED WATER USE

TO: _____

DATE: _____ **TIME:** _____

WEATHER: _____ **NOTICE NO:** _____

SITE: _____

This is to inform you that recycled water use at the described site does not comply with the On-Site Recycled Water User Plan as checked below:

- ☐ Overspraying
- ☐ Ponding
- ☐ Irrigation during rainy weather
- ☐ Irrigation during restricted time of day
- ☐ Irrigation at non-allowed site
- ☐ Unapproved construction
- ☐ Broken irrigation facility
- ☐ Requirements of Notice No _____ on _____ have been met.

Specific Requirements Are: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

By: _____

Phone Number: _____

APPENDIX 28

NON-RESIDENTIAL SITE FINAL INSPECTION

NON-RESIDENTIAL SITE
FINAL INSPECTION

Contractor Name:	
Project Name:	
Address:	

F. **Final Inspection**		**Date Completed**		**Initial**
1	Record Drawings received and filed			
2	Emergency information completed: Name, Address, Phone numbers,			
3	Standard agreement signed and recorded			
4	Landscape maintenance company information provided: Name, Address Phone			
5	Recycled water use training provided to landscaper			
6	Final Walk-through completed: Purple boxes, warning labels, purple caps on sprinklers, check over-spray and runoff			
7	Photos and inspection reports sent to file			
8	On-Site Recycled Water User Plan approved			
9	Recycled water tested			
10	Potable water tested			
11	Recycled meter installed			

Comments: Items 3,5,8,9,10,11 will be addressed prior to recycled water becoming available.

APPENDIX 29

PLAN CHECK PROCEDURES FOR ON-SITE BUILDING RECYCLED WATER SYSTEMS

MARINA COAST WATER DISTRICT
SPECIAL ON-SITE RECYCLED WATER NOTES FOR DUAL-PLUMBED BUILDINGS

1. The installation of the on-site building recycled water system shall conform to the regulations for the construction of such systems within MCWD; the accompanying plans and specifications, and all applicable codes, ordinances, and amendments of the cognizant building authority.

2. Before plumbing construction begins, the developer's contractor shall arrange a pre-construction meeting with MCWD's Water Systems inspector and the plumbing contractor; the MCWD inspector should be contacted at (831) 384-6131.

3. The on-site recycled water and potable water systems shall be subject to inspection by MCWD and shall be exposed until approved by the Water Systems inspector, who should be contacted at (831) 384-6131.

4. At the owners expense an in-line filter is required down stream of the recycled water meter; the manufacturers name, size, and type shall be called out on the plans. Contact MCWD for suggested types and manufacturers.

5. Piping to be used for the recycled water risers within buildings shall by Type L copper pipe, and shall be continuously wrapped with purple colored mylar tape.

6. The internal recycled water identification wrapping tape shall be a nominal 0.005" thick, with a minimum width of two inches. The tape shall be fabricated of polyvinyl chloride with a synthetic rubber adhesive, and a clear polypropylene protective coating. The tape shall be purple (Panatone Color No. 249C), and shall be imprinted in nominal ½" high, black, upper case letters, with the words, "CAUTION: RECYCLED WATER, DO NOT DRINK." The lettering shall be imprinted in two parallel lines, such that after wrapping the pipe with a one-half width overlap, one full line of text is visible.

7. All below grade recycled water piping shall be identified with warning tape. The warning tape shall be an inert plastic film with a minimum thickness of 4 mils. The tape shall be purple (Panatone Color No. 249C), and shall be permanently imprinted in black, upper case letters, with the words, "CAUTION: RECYCLED WATER, DO NOT DRINK." The overall width of the tape and the height of the letters shall correspond to the size of the pipe as follows:

   A. 6-inch and larger pipe shall have 6-inch wide tape with minimum 1 7/8-inch high letters.

   B. 8-inch and larger pipe shall have 12-inch wide tape with minimum 3 ½-inch high letters.

8. The below grade warning tape shall be:

   A. Installed directly on the top of the pipe longitudinally.

   B. Installed continuously for the entire length of the pipe.

C. Fastened to the pipe by plastic adhesive tape banded around the warning tape and pipe at no more than five-foot intervals.

9. All recycled water control valves within buildings shall be lever handle ball valves equipped with a locking feature. All mechanical equipment which is appurtenant to the recycled water system shall also be painted to match the mylar wrapping tape.

10. Both the potable and recycled water system risers within the buildings shall be equipped with a manual drain, and an air/vacuum relief valve which will allow the entire riser to be drained.

11. No cross connections between recycled water and potable water of any kind shall be made with or without mechanical backflow prevention.

12. All recycled water risers within the building, including appurtenances such as air/vacuum relief valves, pressure reducing assemblies, etc., shall be installed in the opposite end of the bathroom from the potable water risers, or opposite walls as applicable, and where feasible.

13. Recycled water piping and potable water piping within the walls, ceilings, or floors will NOT be installed with parallel runs.

14. No stub-outs beyond the plumbing core will be permitted from the recycled water system.

15. Recycled water lines running parallel to potable water lines shall be installed at least ten feet horizontally from potable water lines where possible and unless exposed. Where potable and recycled water lines cross the recycled water lines should cross a minimum of one foot below potable water lines. Where separations cannot be maintained, an effective separator, which may consist of, but is not necessarily restricted to, a single sheet of standard drywall, or aluminum sheeting, is to be installed within the wall between recycled water and potable water headers. The effective separator shall extend the full width of the wall section, and be a minimum of three feet in length centered on the piping headers.

16. No changes or connections shall be made to either piping system without approval by MCWD's On-Site Water Systems inspector.

17. An initial cross-connection test must be successfully completed by MCWD before the building can be occupied. To schedule the test, the developer's contractor should contact MCWD's On-Site Water Systems Section at (831) 384-6131.

18. All restrooms using recycled water for toilets, urinals, and trap primers will be identified with signs in accordance with the requirements of MCWD and the responsible building authority. At a minimum, the signs will contain ½-inch high letters of a highly visible color on a contrasting background. At least one sign shall be installed in each bathroom location. The location will be such that the sign is visible to all users, and the location will be approved by MCWD and the responsible building authority. The signs will have the following text:

"TO CONSERVE WATER, THE RESTROOMS IN THIS BUILDING USE RECYCLED WATER FOR FLUSHING THE TOILETS AND/OR URINALS."

Each equipment room containing recycled water equipment shall have a sign posted in both English and Spanish with the following wording in one-inch high white letters on a purple background:

"CAUTION
RECYCLED WATER
CAUTION DO NOT DRINK
NOTICE
CONTACT BUILDING MANAGEMENT BEFORE PERFORMING ANY WORK ON THIS WATER SYSTEM"

This sign shall be installed in a location that is visible to anyone working on or near recycled water equipment.

19. Each recycled water control valve within a wall shall have its access door into the wall equipped with a warning sign approximately six inches square with wording in ½-inch white letters on a purple background. The size, shape, and format of this sign shall be substantially the same as the equipment room signs. The signs shall be attached in the access door frame by means of two short lengths of bands, and shall hang in the center of the access door frame. A Spanish language version of the sign shall be installed on the inside of the access door. This sign requirement will be applicable to any and all access doors, hatches, etc.

20. Each lever handle ball control valve, or appurtenance, shall be sealed in a manner approved by MCWD after the recycled water system has been approved and placed into operation. The type of seal shall be, as applicable, either a plastic and wire snap-off padlock seal, or a plastic pull-tie seal and tag, which, if broken after system approval, shall be deemed conclusive evidence that the recycled water system has been accessed. The seals shall be purple with serial numbers and the letters "MCWD" imprinted in white for identification. The seals will be supplied by MCWD or by other arrangements acceptable to MCWD.

END OF SECTION

APPENDIX 31

Landscape Site Data Table
&
Summary of Water Consumption

January 2016

Marina Coast Water District

11 Reservation Road, Marina, Ca 93933
831-384-6131
Water Conservation Department
831-883-5905
Fax 831-384-0197

This document is required as part of the Landscape Documentation Package submitted to the District for plan check procedures. As needed, please attach additional worksheets showing any required calculations.

Project Information:

Date
Project Name
Project Location
Project Address

Project Applicant:

Applicant's Name	
Title	
Company	
Applicant's Address	
City	Phone Number
State	Fax Number
Zip Code	Email

Project Owner or Designee:

Name	
Title	
Company	
Applicant's Address	
City	Phone Number
State	Fax Number
Zip Code	Email

Landscape Site Data Table

For each complete project site, each individual lot, and each individual landscape water meter, the applicant shall provide the square footage and acreage for the categories shown in the table below. The same information for each individual metered area is to be provided later in the Summary of Water Consumption section.

In some instances, as required, the site data requested may be presented in a format different than that shown below. It is requested that the document provided to the District be a separate 8.5"x11" attached document.

Categories	Site	Typ. Lot
1) Total project area	**acres**	**acres**
	sq. ft.	**sq. ft.**
2) Area of structures, hardscape	**acres**	**acres**
	sq. ft.	**sq. ft.**
3) Area of non-irrigated open space	**acres**	**acres**
	sq. ft.	**sq. ft.**
4) Landscape area (irrigated planting area)	**acres**	**acres**
	sq. ft.	**sq. ft.**
A) Landscape plantings	**acres**	**acres**
	sq. ft.	**sq. ft.**
B) Ornamental turf	**acres**	**acres**
	sq. ft.	**sq. ft.**
i) Special landscape area	**acres**	**acres**
	sq. ft.	**sq. ft.**

Summary of Water Consumption

Please complete one Water Consumption Report for each metered landscape connection in the project. For more than one metered landscape connection, utilize the additional sheets following the initial report below.

Water Consumption Report for the Whole Project or 1st Metered Connection (POC # 1)

Name of Project Site or First Metered Area _____

Total Project Area	Acres _____	Ft^2 _____
Area of Structures, Hardscape	Acres _____	Ft^2 _____
Area of Non-irrigated Open Space	Acres _____	Ft^2 _____
Landscape Area (irrigated planting area)	Acres _____	Ft^2 _____
A) Landscape Plantings	Acres _____	Ft^2 _____
B) Ornamental Turf	Acres _____	Ft^2 _____
C) Special Landscape Area	Acres _____	Ft^2 _____

Maximum Applied Water Allowance	Acre - Ft _____	Ft^3 _____
Estimated Total Water Use	Acre - Ft _____	Ft^3 _____

Date: _____ Prepared By: _____

Title: _____
Firm: _____
Phone # _____

Water Consumption Report for 2nd Metered Connection (POC # 2)

Name of Project Site or First Metered Area _____

Total Project Area	Acres _____	Ft^2 _____
Area of Structures, Hardscape	Acres _____	Ft^2 _____
Area of Non-irrigated Open Space	Acres _____	Ft^2 _____
Landscape Area (irrigated planting area)	Acres _____	Ft^2 _____
A) Landscape Plantings	Acres _____	Ft^2 _____
B) Ornamental Turf	Acres _____	Ft^2 _____
C) Special Landscape Area	Acres _____	Ft^2 _____

Maximum Applied Water Allowance	Acre - Ft _____	Ft^3 _____
Estimated Total Water Use	Acre - Ft _____	Ft^3 _____

Date: _____

Prepared By: _____

Title: _____
Firm: _____
Phone # _____

Water Consumption Report for 3rd Metered Connection (POC # 3)

Name of Project Site or First Metered Area _____

Total Project Area	Acres _____	Ft^2 _____
Area of Structures, Hardscape	Acres _____	Ft^2 _____
Area of Non-irrigated Open Space	Acres _____	Ft^2 _____
Landscape Area (irrigated planting area)	Acres _____	Ft^2 _____
A) Landscape Plantings	Acres _____	Ft^2 _____
B) Ornamental Turf	Acres _____	Ft^2 _____
C) Special Landscape Area	Acres _____	Ft^2 _____

Maximum Applied Water Allowance	Acre - Ft _____	Ft^3 _____
Estimated Total Water Use	Acre - Ft _____	Ft^3 _____

Date: _____ Prepared By: _____

Title: _____
Firm: _____
Phone # _____

Water Consumption Report for 4th Metered Connection (POC # 4)

Name of Project Site or First Metered Area _____

Total Project Area	Acres _____	Ft^2 _____
Area of Structures, Hardscape	Acres _____	Ft^2 _____
Area of Non-irrigated Open Space	Acres _____	Ft^2 _____
Landscape Area (irrigated planting area)	Acres _____	Ft^2 _____
A) Landscape Plantings	Acres _____	Ft^2 _____
B) Ornamental Turf	Acres _____	Ft^2 _____
C) Special Landscape Area	Acres _____	Ft^2 _____

Maximum Applied Water Allowance	Acre - Ft _____	Ft^3 _____
Estimated Total Water Use	Acre - Ft _____	Ft^3 _____

Date: _____

Prepared By: _____

Title: _____
Firm: _____
Phone # _____

Water Consumption Report for 5th Metered Connection (POC # 5)

Name of Project Site or First Metered Area _____

Total Project Area	Acres _____	Ft^2 _____
Area of Structures, Hardscape	Acres _____	Ft^2 _____
Area of Non-irrigated Open Space	Acres _____	Ft^2 _____
Landscape Area (irrigated planting area)	Acres _____	Ft^2 _____
A) Landscape Plantings	Acres _____	Ft^2 _____
B) Ornamental Turf	Acres _____	Ft^2 _____
C) Special Landscape Area	Acres _____	Ft^2 _____

Maximum Applied Water Allowance	Acre - Ft _____	Ft^3 _____
Estimated Total Water Use	Acre - Ft _____	Ft^3 _____

Date: _____ Prepared By: _____

Title: _____
Firm: _____
Phone # _____